

The Hy-tex House

OF MODERATE COST



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The Hy-tex House

OF MODERATE COST

A HOUSE OF BEAUTY
GOOD INVESTMENT

PRICE, FIFTY CENTS

HYDRAULIC-PRESS BRICK COMPANY
SAINT LOUIS

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BY THE
HYDRAULIC-PRESS BRICK COMPANY
SAINT LOUIS

Introductory

A great deal of attention is being given at present to the problem of an inexpensive house for suburbs and outlying districts; and in general there is an evident desire to combine, where possible, low cost with a certain degree of picturesqueness. One cannot, however, make the picturesque offhand and to order; it is in a great degree a matter of time. The ancient cottages, which we admire now, were not built to look picturesque; they were built in what appeared, to their constructors, to be the most economical and convenient manner; and their present charm is the effect of time and association. Their low walls, high pitched roofs, and often abnormally small windows, taken to be picturesque, have been frankly imitated, so that we repeatedly see in new houses today these very low walls and very high pitched roofs. Although the windows are not so small as in the old cottages, yet they are much smaller than the best hygienic conditions would demand.

All these attempts are bound to fail of their object because they are palpably artificial and self-conscious efforts to be picturesque—mere imitations of the former manner of building. The low walls are an element of economy in cost, or supposed to be so; but the economy, in consideration of the large roof-space required, is perhaps over-rated. In any case, it is false economy because obviously not the best or most workmanlike manner of producing a convenient interior in a small habitation. The result in the upper story is far from satisfactory, as the rooms are sure to be cut up by the sloping ceilings into inconvenient sizes or shapes.

The practical manner of solving the problem must involve putting aside sentiment and acquired association and considering how best to build houses with the methods of construction and materials now available.

In recent years, owing to the increasing tendency on the part of the American public to have homes in the country or in the open parts of cities, there has been brought about a great demand for the house of moderate cost, which will have a certain character of its own, and which the owner may point to with a sense of pride as a home reflecting his tastes.

Believing that the prospective builder would appreciate seeing in sketch form and plan a group of houses of this character, which might suggest ideas that would aid him in consulting with his architect, the Hydraulic-Press Brick Company offers this collection of drawings. It was with the desire, not only to interest more of the best architects in America in this kind of creative work, but also to afford the intending home builder helpful suggestions in formulating his plans, that this Company recently

conducted a competition for a brick house through the medium of a widely known architectural journal, *The Brickbuilder* of Boston.

The architects who designed these houses worked with a definite program before them. The problem was a detached house, faced with Hy-tex brick, to be built complete at a cost not to exceed \$7500. Provision was to be made for the usual accommodations and conveniences for a small American family of moderate means. It was assumed that the house was to be located in a town, small city, or a suburb of a large city, on a level lot of any size or shape.

All the houses shown in this book were figured at the rate of twenty-two cents per cubic foot, which included cost of excavation, plumbing, heating, electric wiring, hardware and painting; although extravagance of individual taste for expensive interior trimming, plumbing, hardware, etc., may add appreciably to the cost. Porches and verandas were figured separately at one-fourth of their total cubage, provided they projected beyond the bearing walls, and at full cubage if included within such walls.

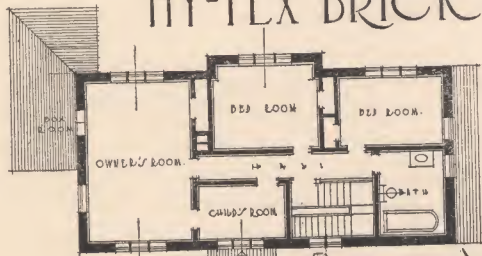
The jury of award was made up of five members of the architectural profession prominently connected with this class of work throughout the Middle West. First consideration was given to the design and its fitness to the material employed, and special attention to the floor plans. Nearly four hundred designs were submitted, and so general was the excellence of the work that the task of elimination and selection was no easy matter.

In presenting the following designs and plans, it is not expected that any one will commit the serious mistake of attempting to build his own house without the aid of an experienced architect. If he makes such an attempt, he may be assured that he will fall into confusion and difficulties that will both threaten the ruin of his plans altogether and run him into added costs. Technical knowledge and professional skill in the building of a house will not only secure higher artistic results, but save far more than the comparatively modest fee of the architect.

These plans will fully serve their purpose if they help to develop and give coherent form to the somewhat vague and indefinite ideas of the intending builder, when he first begins to plan a house of his own. With the belief that they will admirably serve this purpose, they have been published, and are now presented to the interested reader.

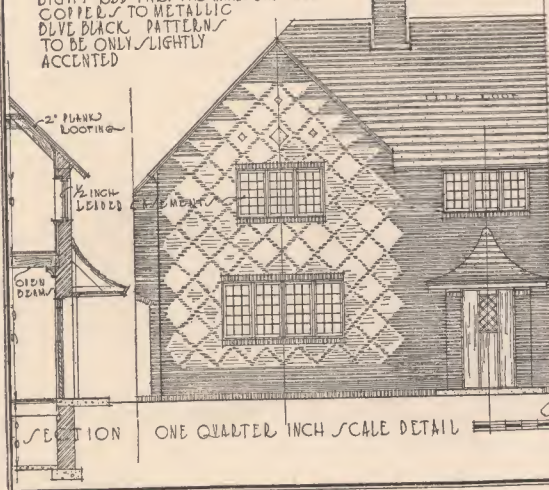
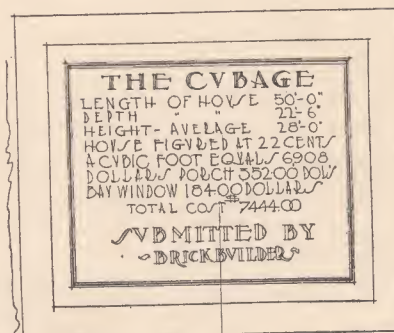


HY-TEX BRICK HOUSE COMPETITION

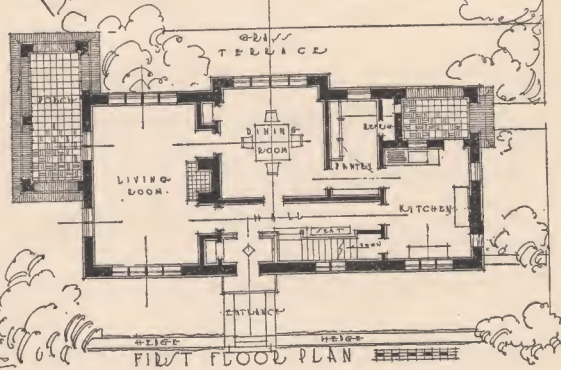


BRICKWORK - MIXED COLOR
LOUGH HY-TEX-DOKALA FROM
LIGHT RED THRU THE MAROON AND
COPPER TO METALLIC
OLIVE BLACK PATTERN
TO BE ONLY SLIGHTLY
ACCENTED

SECOND FLOOR
PLAN



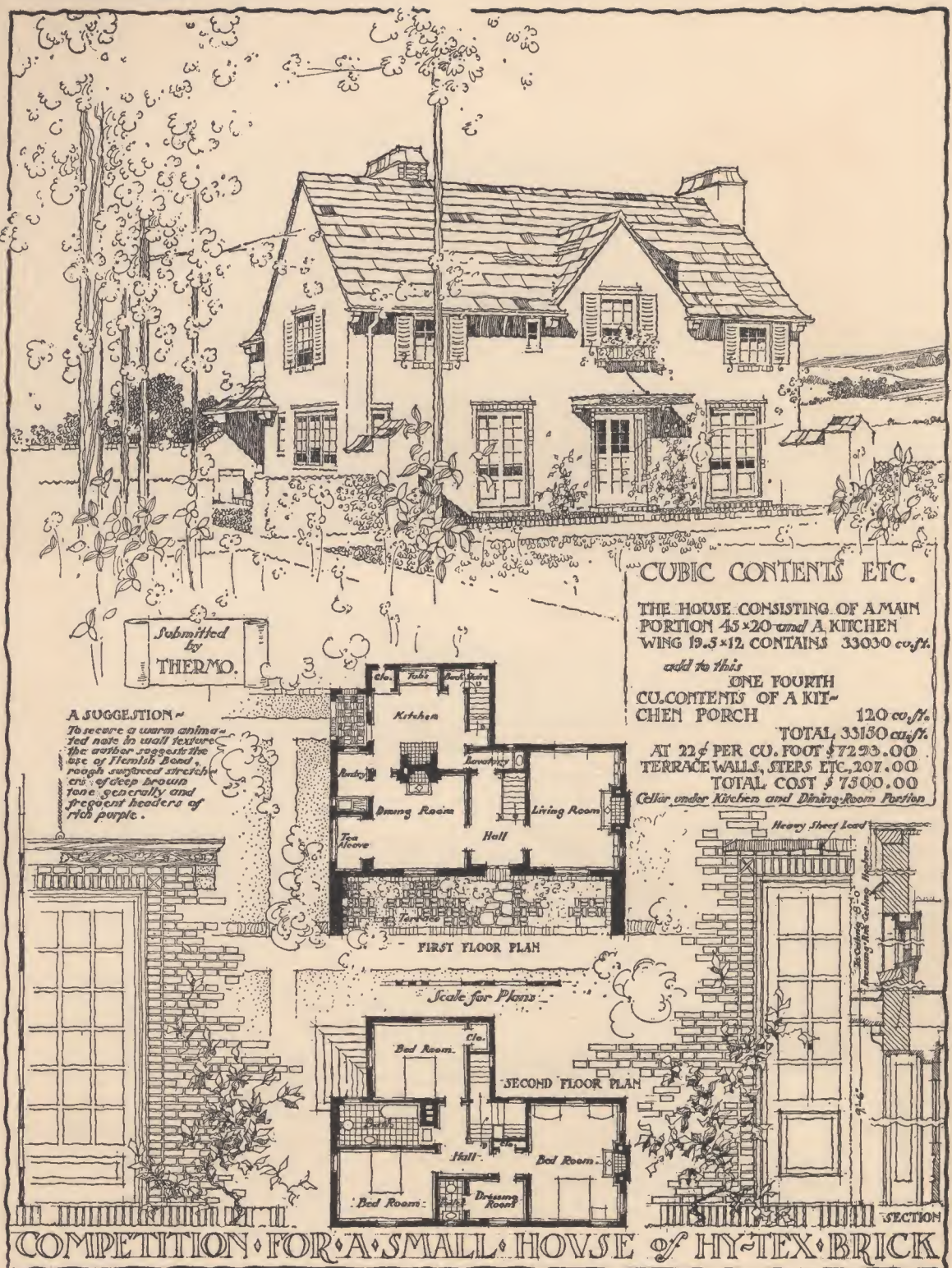
ONE QUARTER INCH SCALE DETAIL



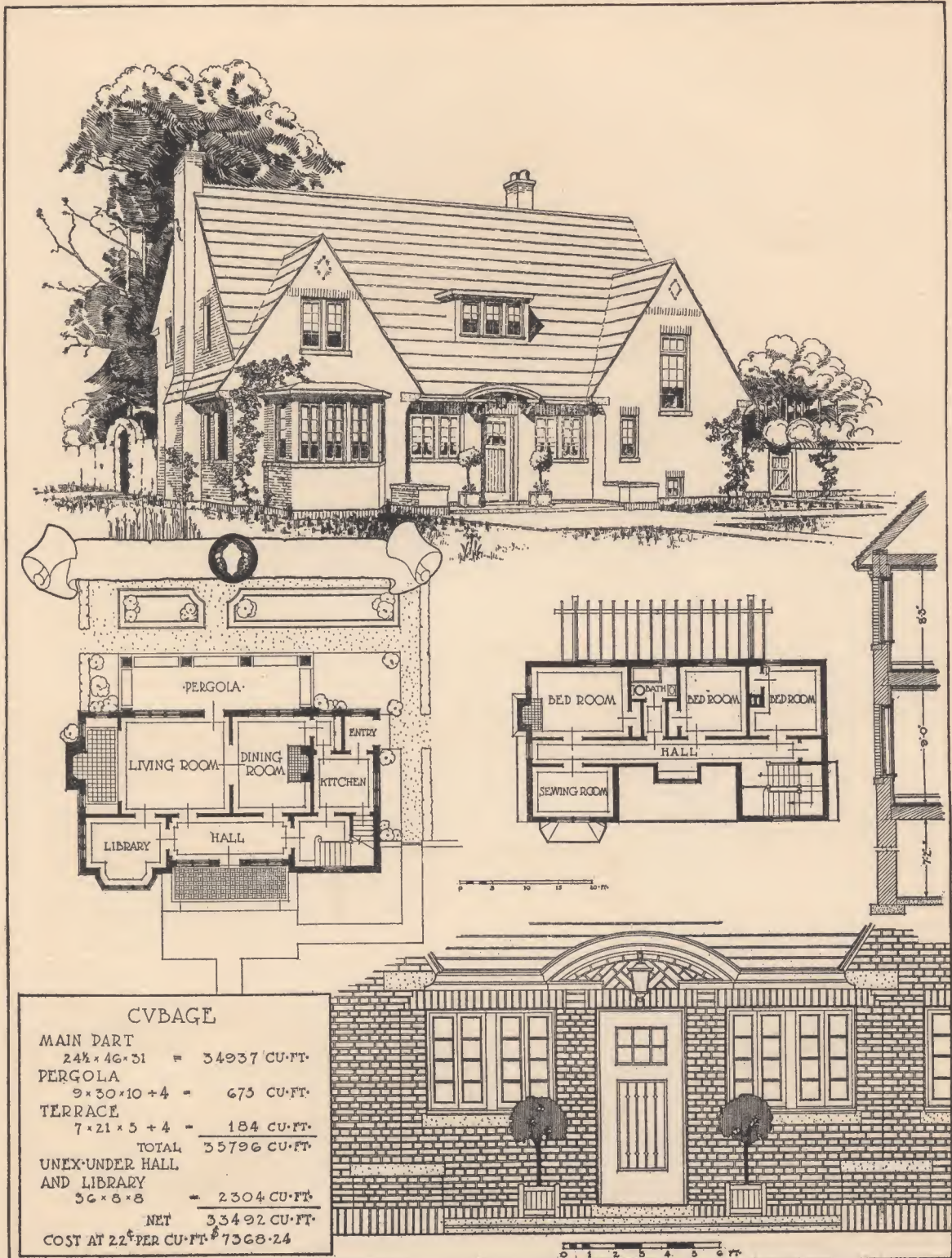
FIRST FLOOR PLAN

FIRST PRIZE DESIGN
 SUBMITTED BY I. P. LORD
 31 Beacon Street, Boston, Mass

The Hy-tex House

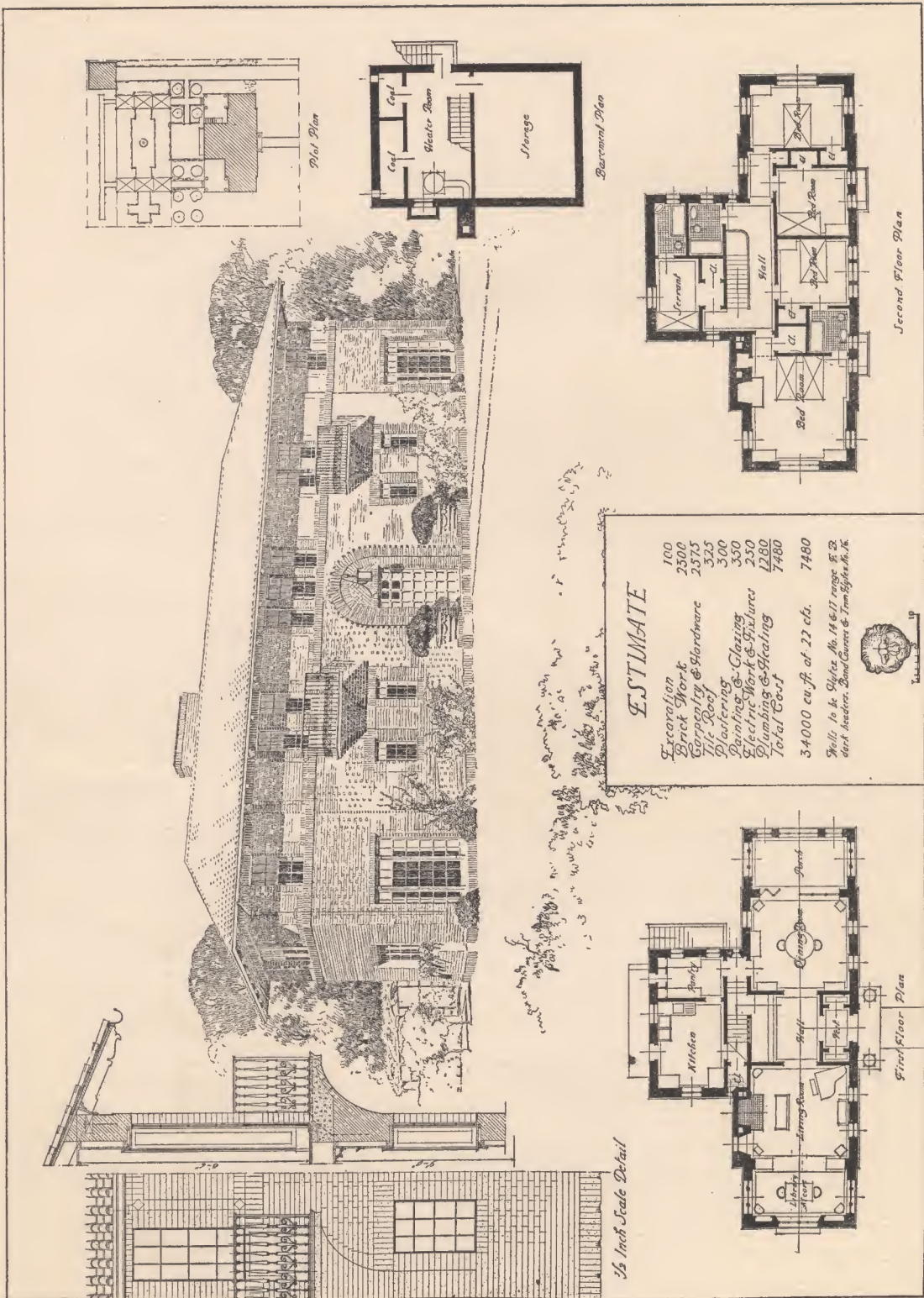


SECOND PRIZE DESIGN
SUBMITTED BY RICHARD M. POWERS
110 State Street, Boston, Mass.

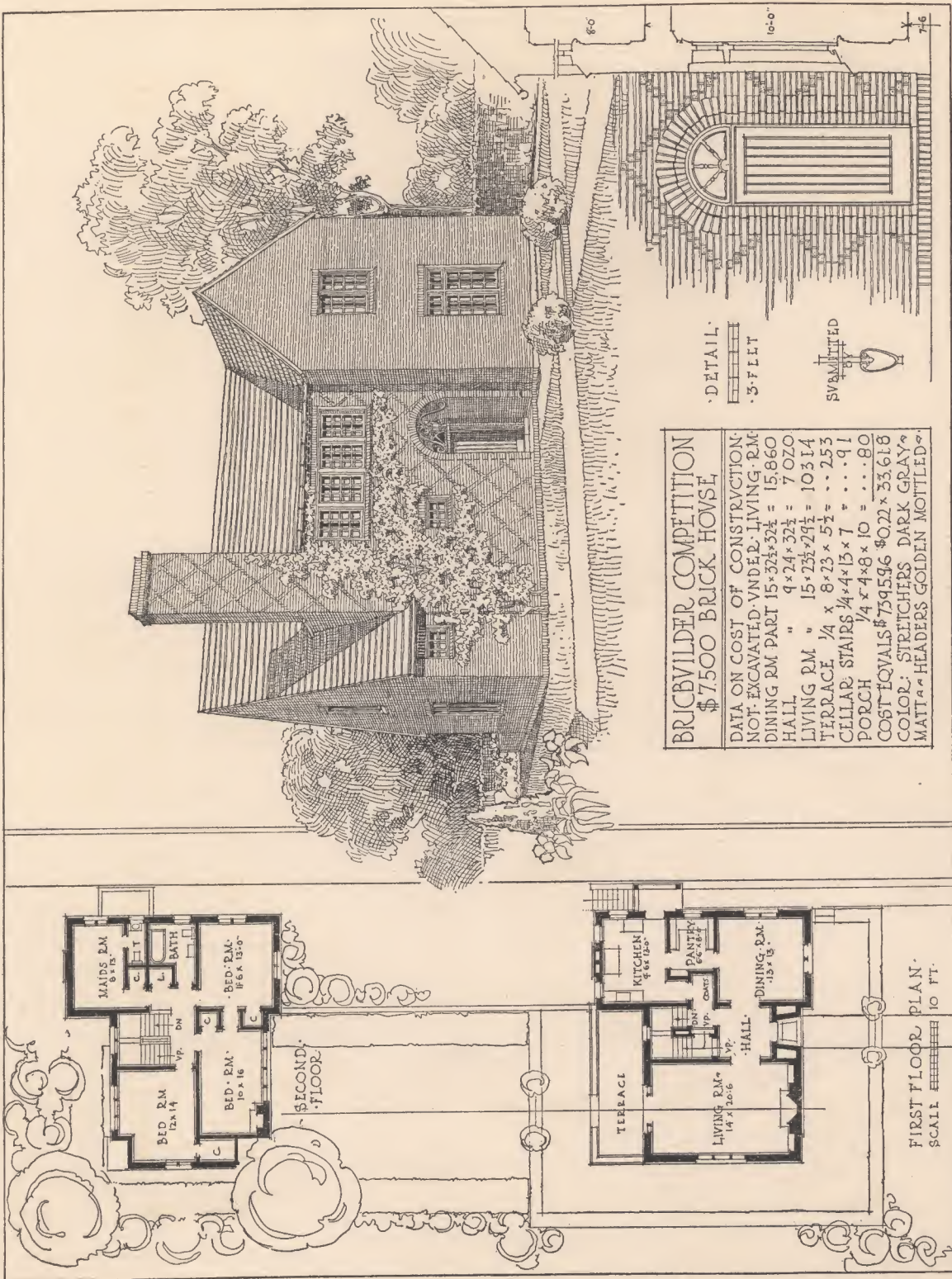


THIRD PRIZE DESIGN
 SUBMITTED BY J. F. MURPHY AND J. R. COLEMAN
 810 Hubbell Building, Des Moines, Iowa

The Hy-tex House



FOURTH PRIZE DESIGN
 SUBMITTED BY LELAND H. LYON
 7 East 42d Street, New York, N. Y.

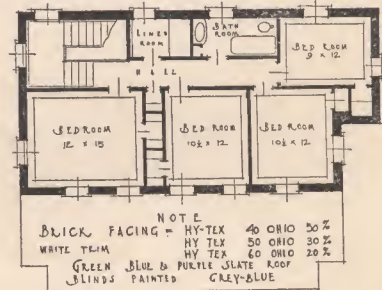
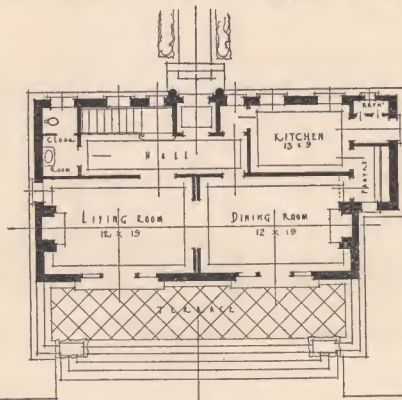
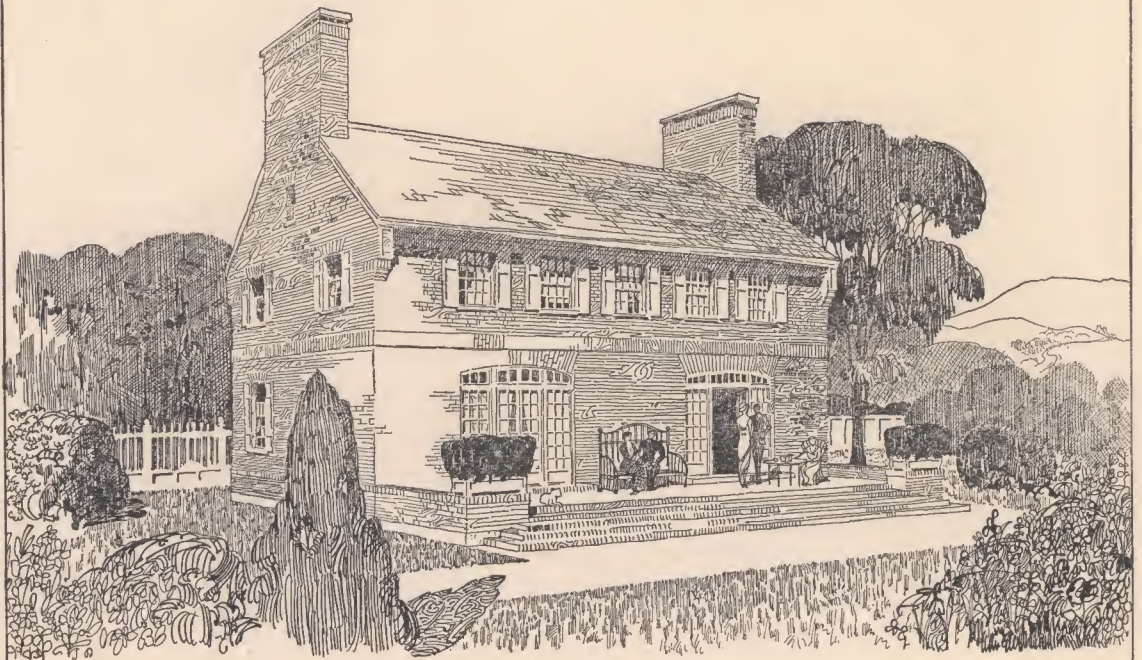


MENTION DESIGN
SUBMITTED BY OLAF WILLIAM SHELGREN
1314 Prudential Building, Buffalo, N. Y.





The Hy-tex House



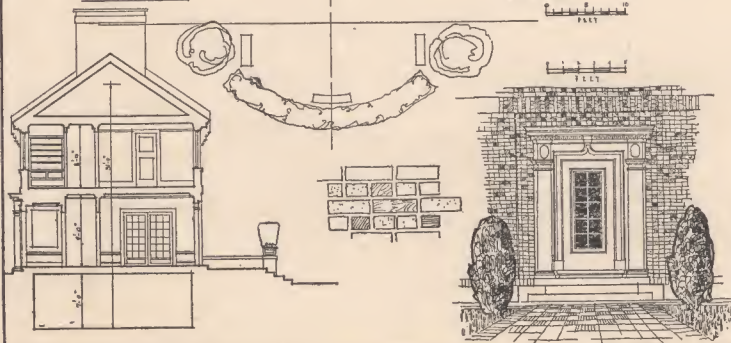
NOTE
BRICK FACING = HY-TEX 40 OHIO 50 %
WHITE TRIM HY-TEX 50 OHIO 50 %
GREEN BLUE & PURPLE SLATE ROOF
BLINDS PAINTED GREY-BLUE

BRICKBUILDER COMPETITION

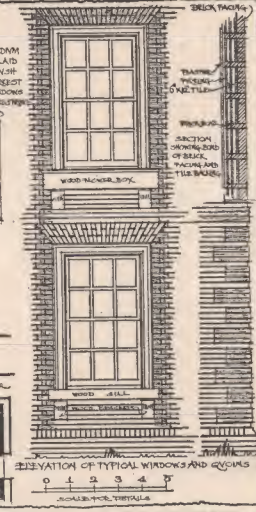
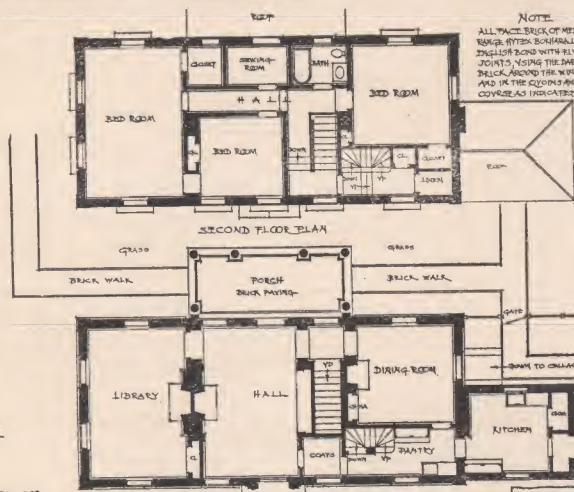
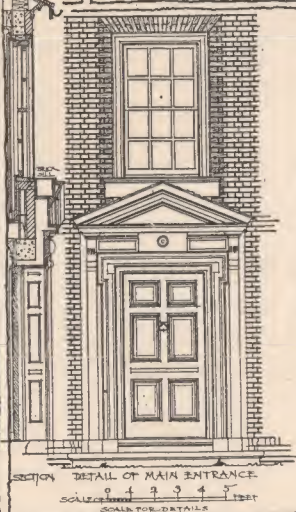
FOR A HOUSE OF
HYTEX BRICK

CUBAGE 6 COST
41' X 23' X 31' + 5' X 14' X 28' = 31,193 ft.
31,193 @ 22¢ = \$ 6,862.00
TERRACE 400.00
TWO MANTELS 120.00
FRONT ENTR. DOORWAY 100.00
BALANCE 18.00
\$ 7500.00

SUBMITTED BY XET-YH



MENTION DESIGN
SUBMITTED BY DOUGLAS RITCHIE
1 Belmont Street, Montreal, Quebec, Canada

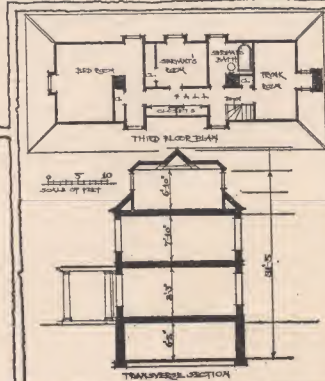


THE CUBAGE
 MAIN BUILDING $21' \times 42' \times 3' 5" = 31671$
 KITCHEN WING $11' 6" \times 13' 9" \times 2' 3" = 1925$
 PORCH $8' 3" \times 19' 9" \times 11' 6" \div 4 = 448$
 TOTAL CYBIC CONTENTS 34054
 TOTAL COST AT 22 CENTS PER CYBIC FOOT \$7492

ITEMIZED ESTIMATE OF COST
 EXCAVATING \$150
 MASONRY 3050
 PLASTERING 300
 FURNISHING, CARPENTRY AND HARDWARE 1000
 MILL WORK 1600
 ROOFING AND METAL WORK, ETC. 250
 PAINTING AND GLAZING 250
 WARM AIR HEATING 350
 HEATING AND RANGE 400
 ELECTRICAL WIRING 150
 TOTAL COST \$7500

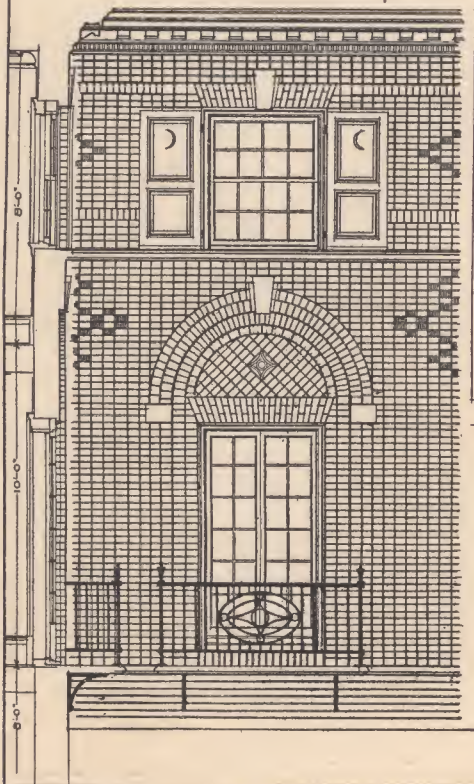
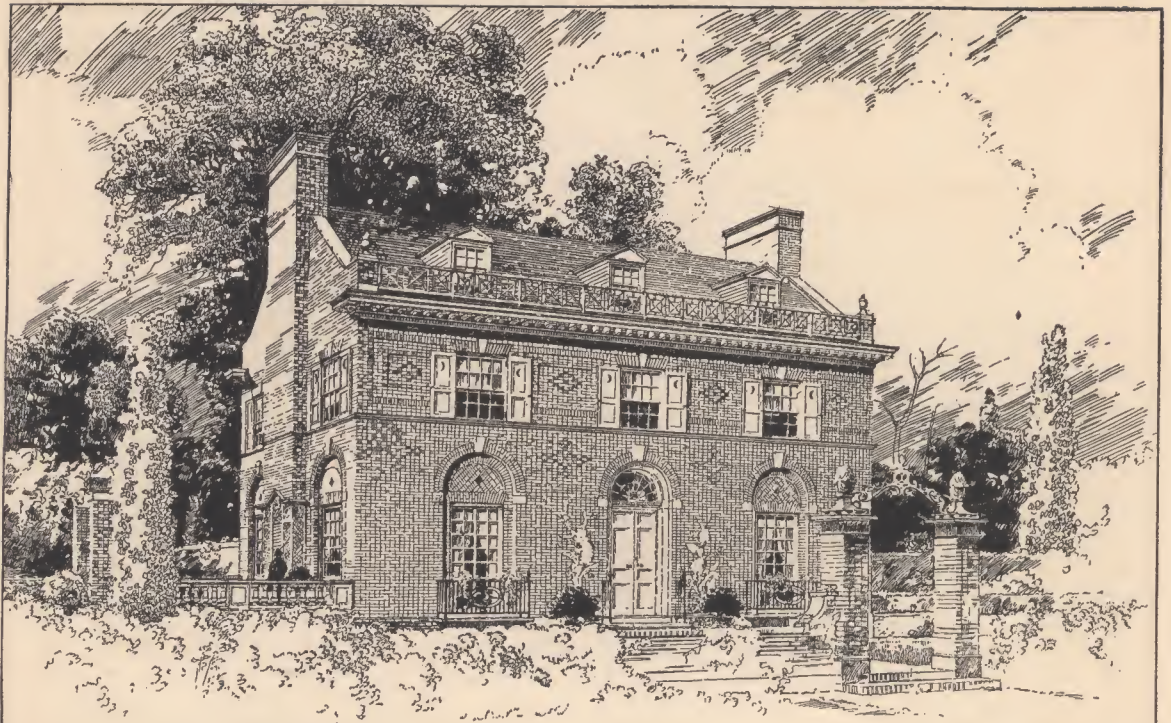
**DESIGN FOR A BRICK HOUSE
 TO COST \$7500
 TO BE FACED WITH
 HY-TEX BRICK**
 MANUFACTURED BY THE
 HYDRAULIC-PRESS BRICK COMPANY

SUGGESTED BY TRISTRAM THREME
 FEB. 10, 1914



MENTION DESIGN
 SUBMITTED BY ALFRED COOKMAN CASS
 77 Washington Place, New York, N. Y.

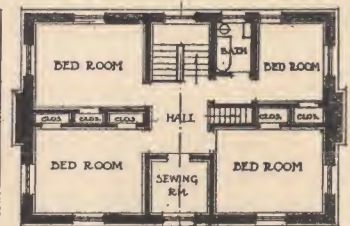
The Hy-tex House



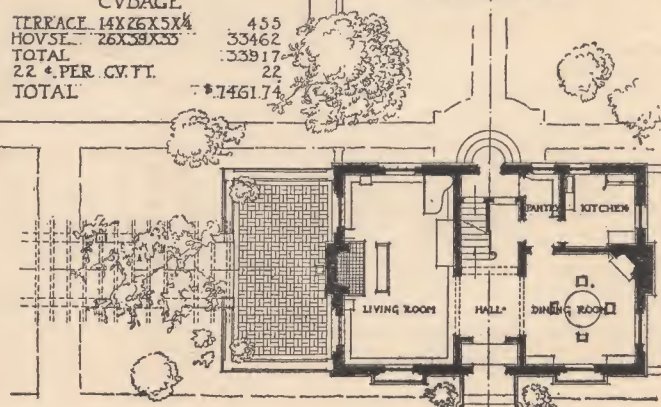
COST OF MATERIALS

EXCAVATION	\$225.00
BRICKWORK	3000.00
LUMBER & CARPENTRY	800.00
MILLWORK	750.00
PAINTING	300.00
PLUMBING	325.00
HARDWARE	100.00
ELECTRIC	70.00
HEATING	225.00
ROOFING	800.00
MISCELLANEOUS	905.00
TOTAL	\$7500.00

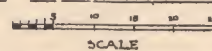
CVBAGE	
TERRACE 14X26X5X4	455
HOVSE 26X58X33	33462
TOTAL	33917
22¢ PER CV. FT.	22
TOTAL	\$7461.74




SECOND FLOOR PLAN



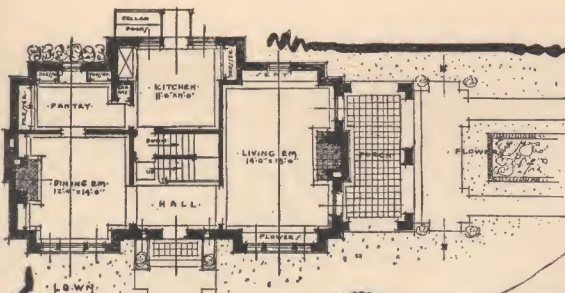
FIRST FLOOR PLAN



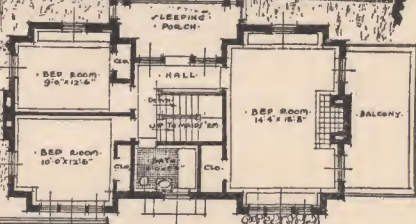
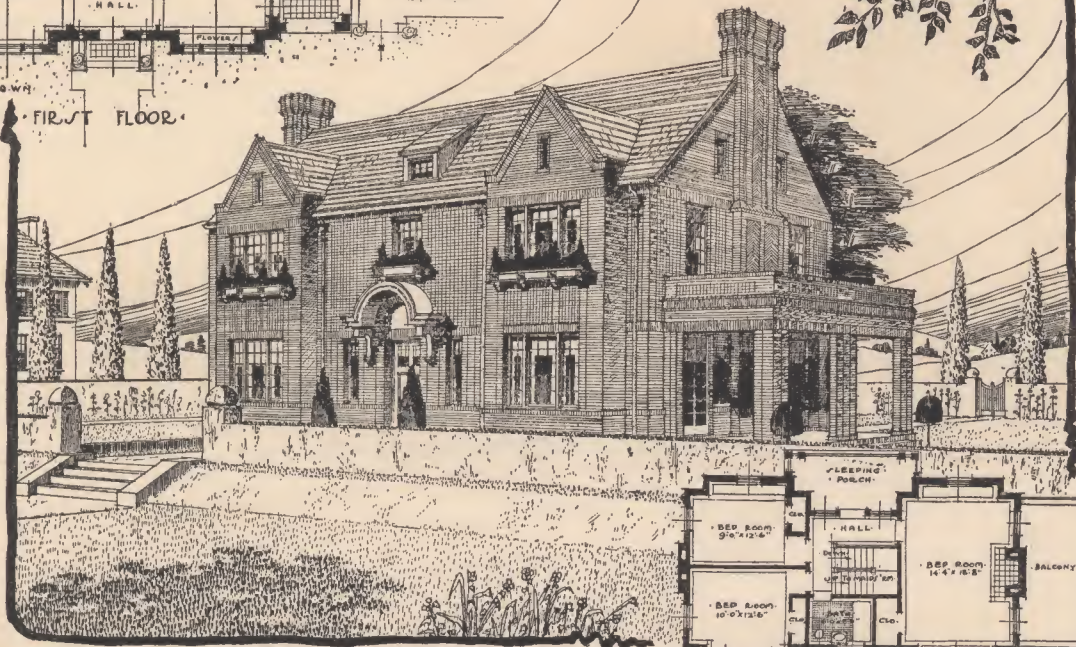
SCALE

SUBMITTED BY 

MENTION DESIGN
SUBMITTED BY ANTONIO DI NARDO
101 Park Avenue, New York, N. Y.

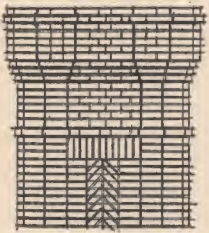


FIRST FLOOR

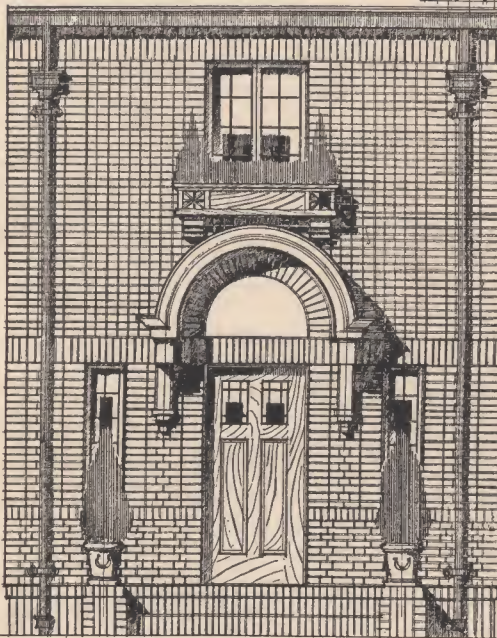
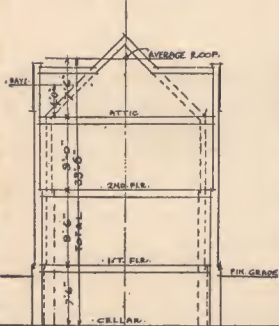


SECOND FLOOR

CHIMNEY DETAIL



SECTION



CUBIC CONTENTS

MAIN BODY	20' x 42' x 33' 6"	28,140
BAYS	4 (11' 6" x 1' 6" x 30')	2,070
REAR PROJECTION	18' x 5' x 33'	2,970
PORCH	(18' x 10' x 16') ÷ 4 =	.720
AREAWAYS		.100

TOTAL CU. FT. 34,000

COST 34,000 CU. FT. @ 22¢ = \$7,480

COLOR SCHEME: HY-TEX VELOUR BODY COLOR. DIVERSE PATTERNS LIGHTER SHADE. RAKED CUT JOINTS 1ST. STORY. FLUSH JOINTS ABOVE 1ST. FLR. WINDOW HEADS. WHITE MORTAR.

SCALE

PLANS

DETAILS

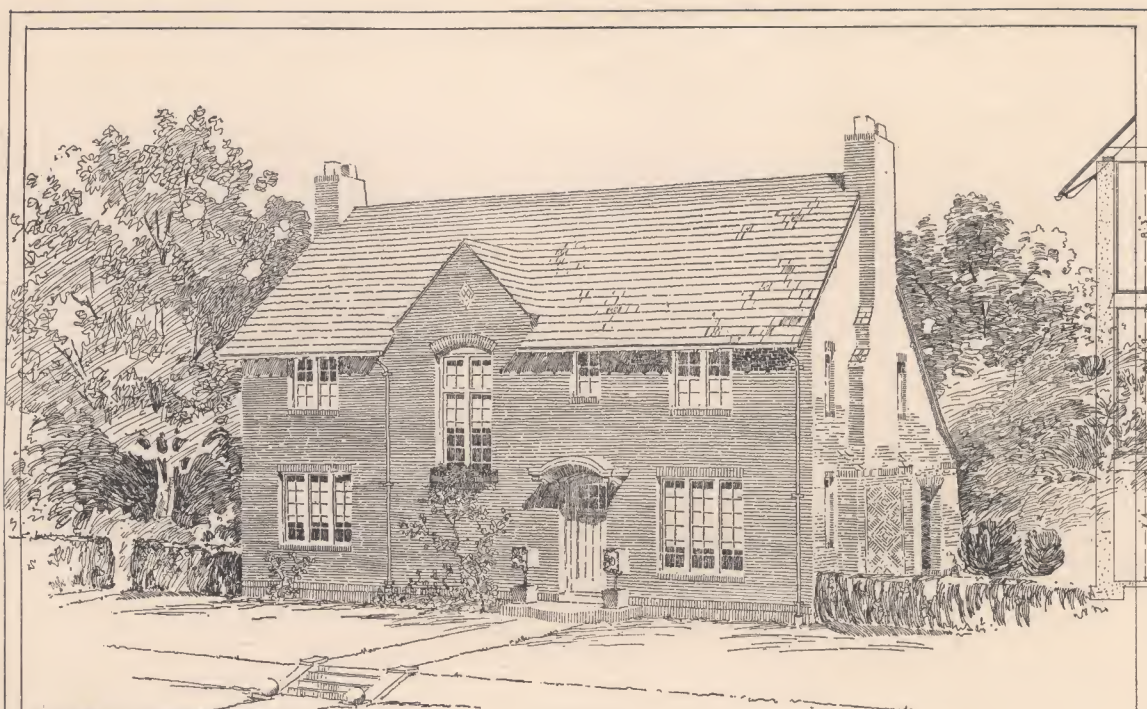
HY-TEX BRICK HOUSE COMPETITION

SUBMITTED BY

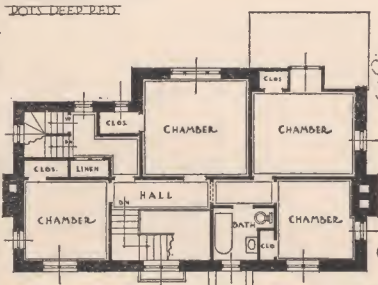


DESIGN BY FRED B. O'CONNOR
232 B Ontario Street, Albany, N. Y.

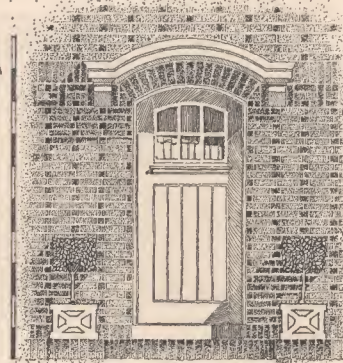
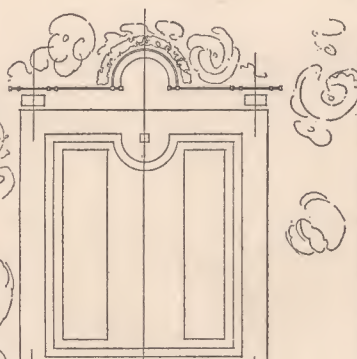
The Hy-tex House



COLOR SCHEME
 BRICK LIGHT RED
 HEADERS & PATTERNS DARKER SHADES
 ROOF SILVER GRAY
 WOODWORK WHITE
 DOYS DEEP RED



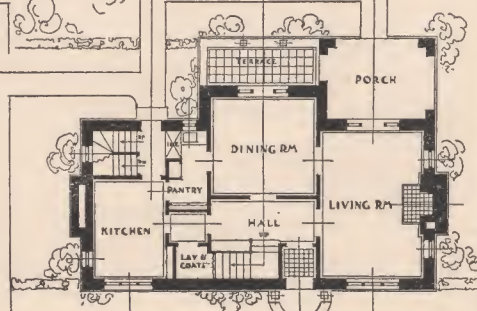
SECOND FLOOR PLAN



COMPETITION
 FOR A
BRICK HOUSE
 TO COST \$7500
 GIVEN BY
THE BRICKBUILDER
 FEBRUARY 1914

SCALE FOR PLANS
 SCALE FOR PERSPECTIVE & SECTION
 SCALE FOR DETAIL

"HIS LAST ATTEMPT"



FIRST FLOOR PLAN

NOTE:

CV BAGE IS FIGURED IN FOUR
 SECTIONS: MAIN BODY OF
 HOUSE: $21' \times 44' \times 33' = 30492$ CV
 FT: DINING RM PROJECTION
 $4' \times 16' \times 33' = 2112$ CV FT PORCH
 $10' \times 6' \times 15' \div 4 = 306$ CV FT
 TERRACE $6' \times 15' \times 4' \div 4 = 90$ CV FT
 TOTAL CV FT 33200 X 22 =
 730400 TOTAL COST WITH
 BASEMENT UNDER ENTIRE

HOUSE:

EXCAVATION 150 HEATING 650 PLASTERING 400
 MASONRY 2700 PLUMBING 350 SHEET METAL 100
 LUMBER 400 WIRING 100 LIGHT FIXTURES 50
 CARPENTRY 350 HARDWARE 100 GAS PIPING 100
 MILL WORK 500 HARDWARE 150 PAINTING ETC 250

DESIGN BY WARNER A. EBBETTS
 6049 Catharine Street, Philadelphia, Pa.

The Hy-tex House

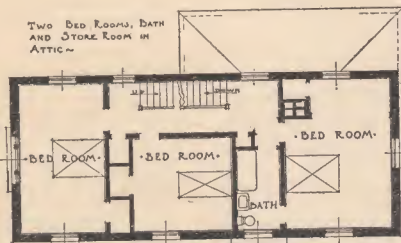


-CUBAGE-

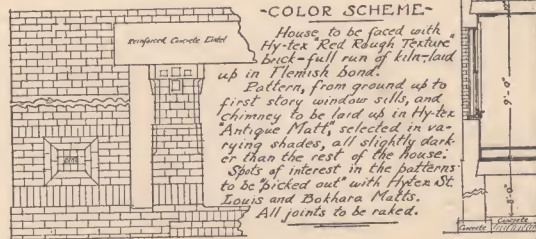
Main Bldg. (Cellar) 37' x 20' x 22' = 16520 cu. ft.	16520
Basement 11' x 10' x 10' = 1100 cu. ft.	1100
Kitchen Bldg. 10' x 7' x 10' = 700 cu. ft.	700
Porch 10' x 7' x 10' = 700 cu. ft.	700
Area 10' x 7' x 10' = 700 cu. ft.	700
TOTAL	26620

-ITEMS OF COST-

Excavating	75
Foundations, Brick or Stone	350
Brickwork & Fireplaces & Eaving	2060
Blue Lining	45
Ke. Cases, Lintels & Ceiling Floor	500
Flooring & Rough Lumber	530
Carpenters & Rough Labor	900
Millwork	800
Slate Roof	225
Plastering	370
Sheet Metal Work	125
Steel Beam & Small Irons	30
Plumbing	500
Heating, Hot Water	510
Electric Wiring	170
Painting & Glazing	265
Hardware & Nails	145
Miscellaneous	100
TOTAL	\$7500

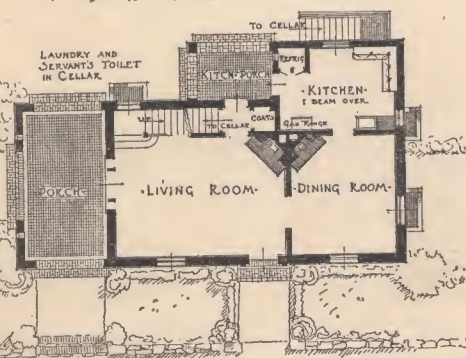
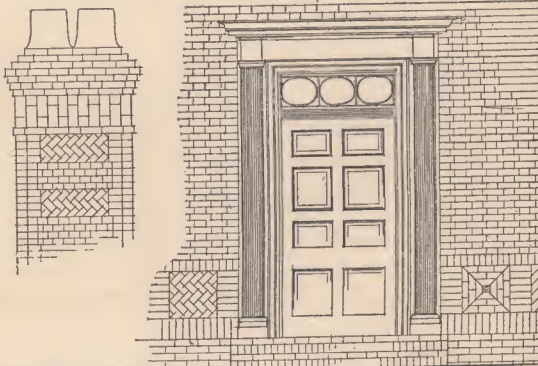


SCALE FOR PLANS
0 5 10 15 20



SCALE FOR DETAILS
0 1 2 3 4 5 6

SCALE FOR SECTION
0 1 2 3 4 5 6



SUBMITTED BY



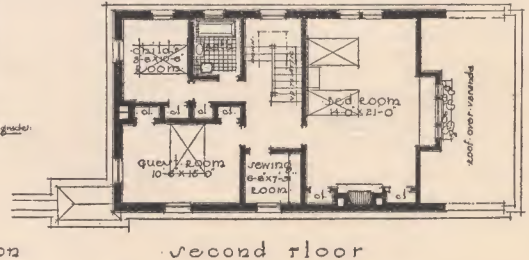
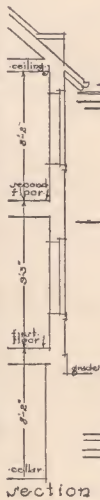
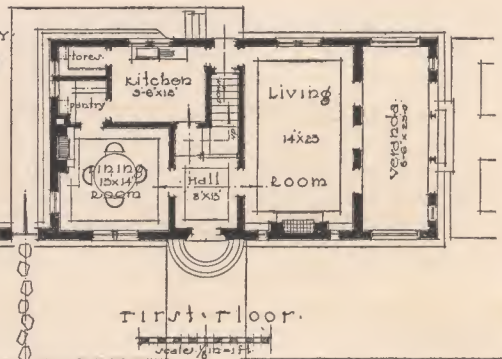
**BRICK HOUSE TO COST \$7,500 ~
FACED WITH HY-TEX BRICK**

DESIGN BY BAYARD TURNBULL
328 North Charles Street, Baltimore, Md.

The Hy-tex House

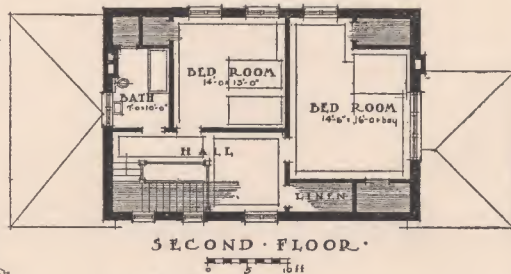
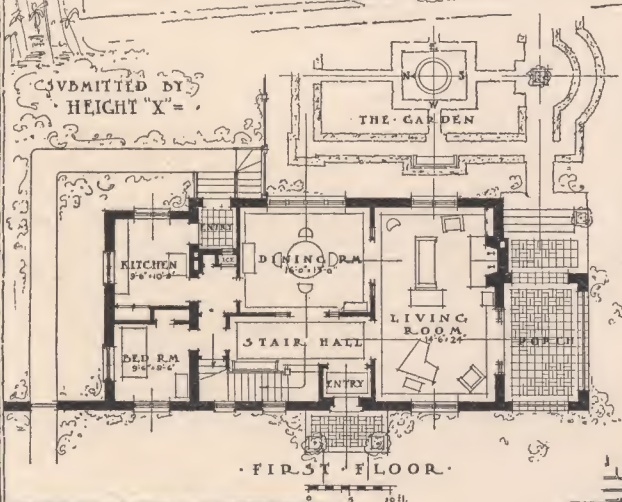


CUBAGE (HOUSE ONLY) 39'X25'X32'=32644 cu ft
 " VERANDA 25'X10'X14'=833 "
 " TOTAL 33474 "
 33474 cu ft @ 22¢ A CU FT FOOT = \$7364.00
 EXCAVATION = \$150.00 PLUMBING = 350.00
 FOUNDATION = 450.00 ELEC WIRE = 150.00
 MASONRY = 3500.00 ALLOWANCE = 200.00
 CARPENTRY = 2500.00 MISCELL = 200.00
 HEATING = 200.00 TOTAL = \$7500.00



BRICKBUILDER COMPETITION A BRICK HOUSE TO COST \$7,500

DESIGN BY RALPH T. WALKER
 1104 Franklin Street, Melrose Highlands, Mass.

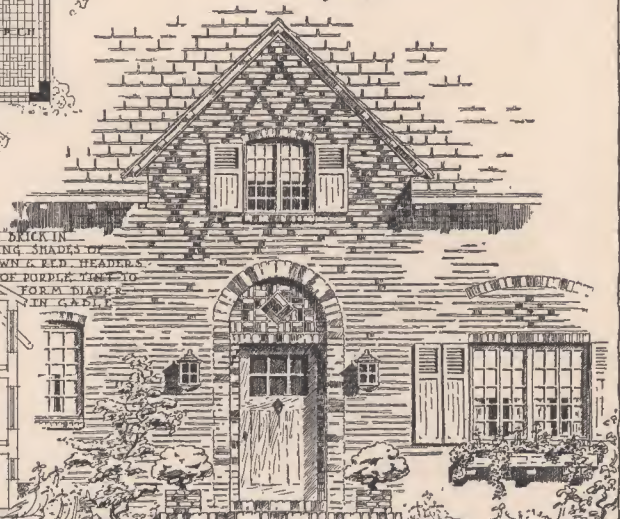
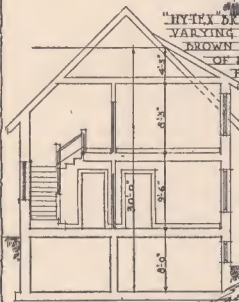


CUBAGE

MAIN PORTION	381'26'30"	500.50
SERVICE WING	25'10'12"	32.81
PORCH	17'10'12"	5.58
TERRACES & STEPS		1.25
TOTAL		539.94
AT 22¢ COST		\$117.48

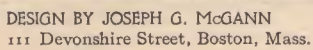
ITEMS

EXCAVATING	\$ 95.
CONCRETE & CEMENT	450.
BRICK	1490.
SHEET METAL	95.
SLATE	390.
CARPENTRY	1280.
MILL & STAIRS	1015.
PLASTER	500.
PAINT, STAIN & GLAZING	450.
HARDWARE & FIXTURES	180.
PLUMBING	550.
WIRING	100.
MISCELLANEOUS	100.
COMMISSION 10%	67.95
TOTAL COST	\$7474.50

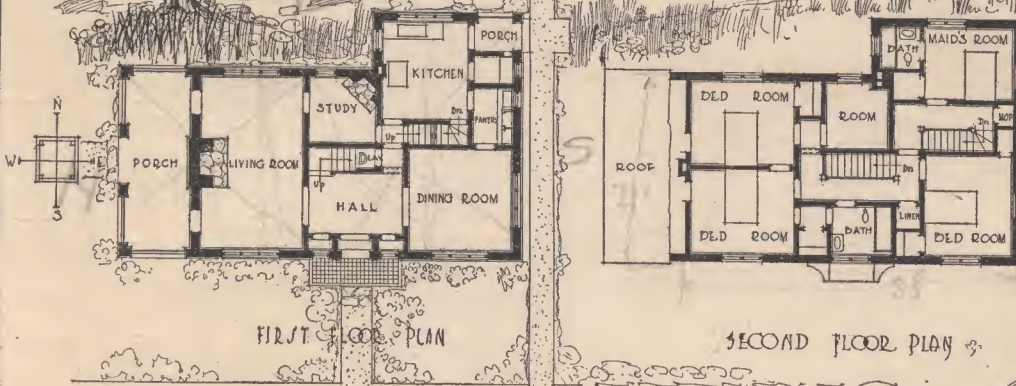


A HY-TEX HOUSE TO COST \$7500.00

A detailed black and white line drawing of a two-story house. The house features a gabled roof, a prominent chimney on the left side with smoke rising from it, and a small porch on the far left. The front facade has several windows, some with shutters, and a central arched doorway. A large, leafy tree stands to the right of the house. In the background, there are more trees and a fence. The entire scene is enclosed within a decorative border at the bottom, which includes a small rectangular inset in the lower right corner.

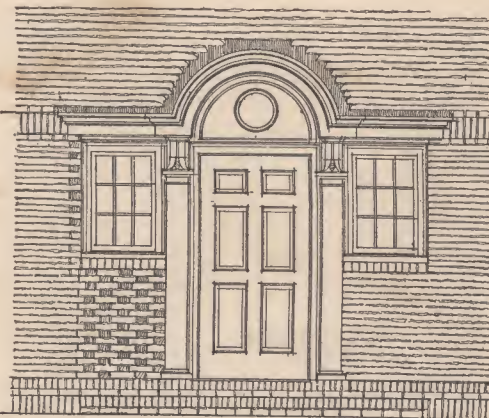


The Hy-tex House



CUDICAL CONTENTS

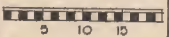
MAIN PORTION
 $23'-6" \times 42'-0" \times 30'-0" = 29,610$
 KITCHEN PORTION
 $7'-0" \times 18'-6" \times 30'-0" = 3,885$
 LIVING ROOM PORCH
 $23'-6" \times 9'-0" \times 10'-0" [25'] = 529$
 TOTAL CUDICAL FEET 34,024
 AT 22 CENTS A
 CUDICAL FOOT
 EQUALS \$7,486.



RED RANGE.
 HY-TEX BRICK.
 FLEMISH BOND
 FLUSH JOINT
 1/2" ROUGH CUT
 CREAM WHITE



SCALE OF PLANS



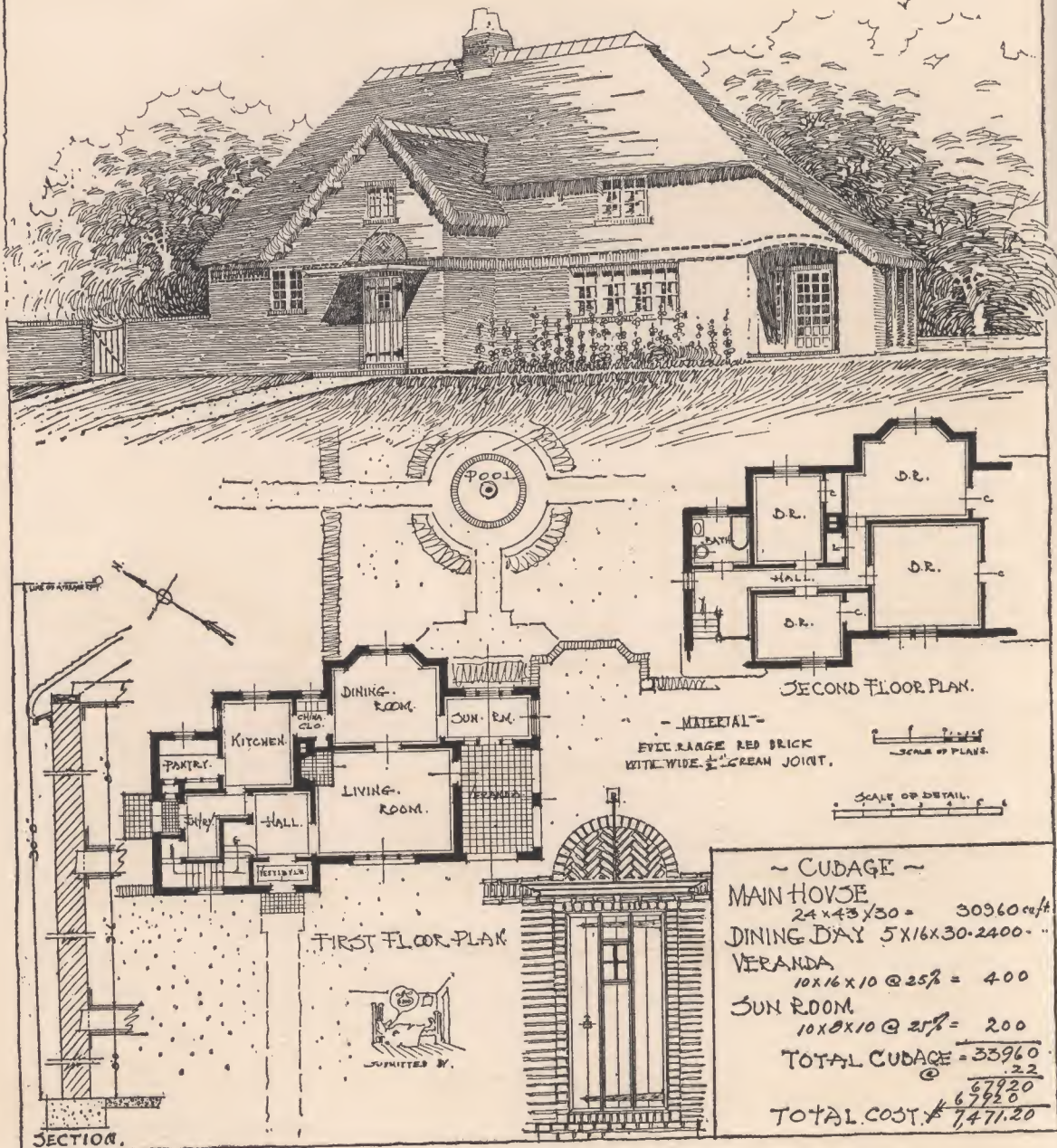
COMPETITION FOR A BRICK
 HOUSE TO COST \$7,500

SUBMITTED BY

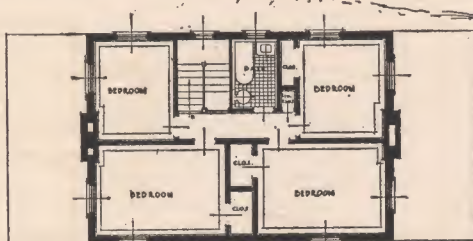
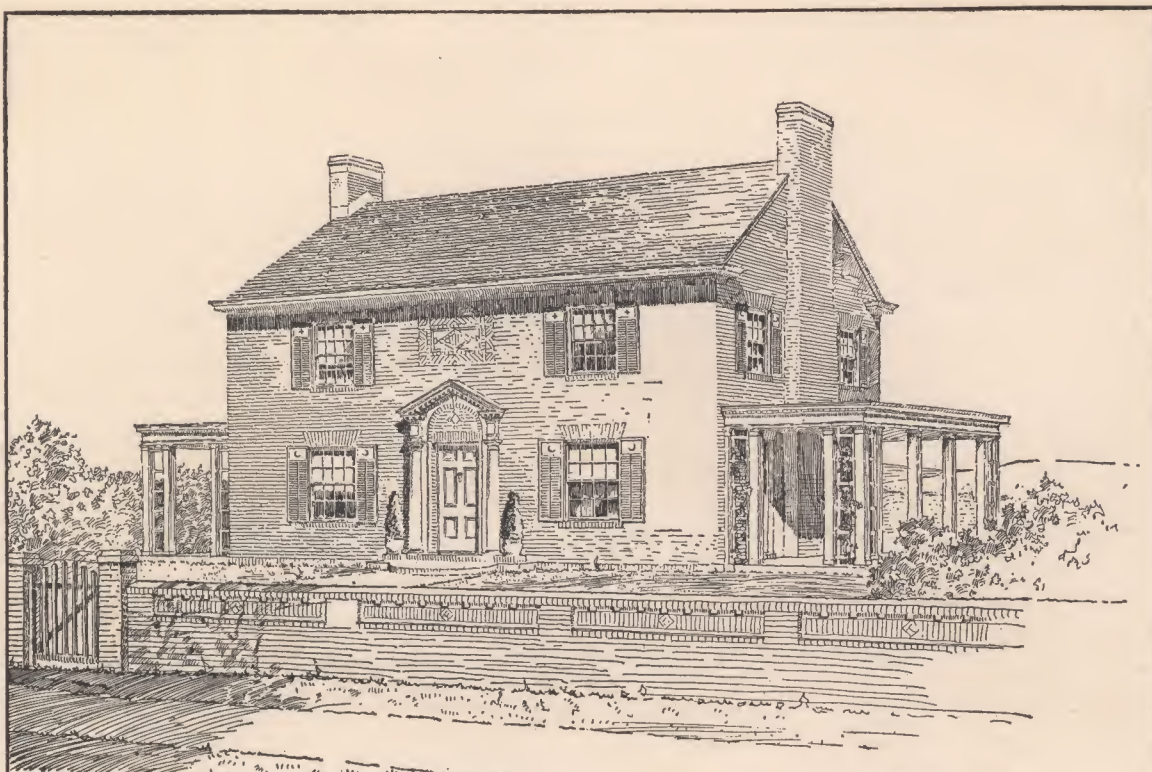
DESIGN BY HENRY E. McCLAY AND W. P. CALLAHAN
 93 Federal Street, Boston, Mass.

Hardhouse Road

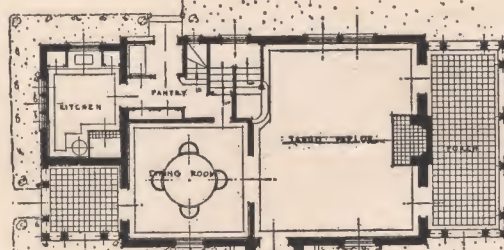
BRICKBUILDER COMPETITION FOR A \$7500.00 HY-TEX BRICK HOUSE



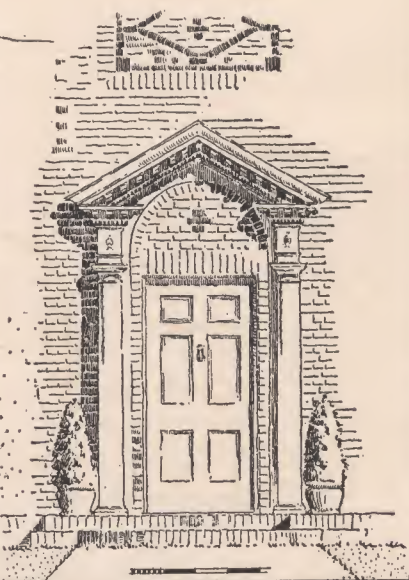
DESIGN BY CLARENCE B. HALL
 93 Federal Street, Boston, Mass.



SECOND FLOOR PLAN



FIRST FLOOR PLAN



CUBAGE

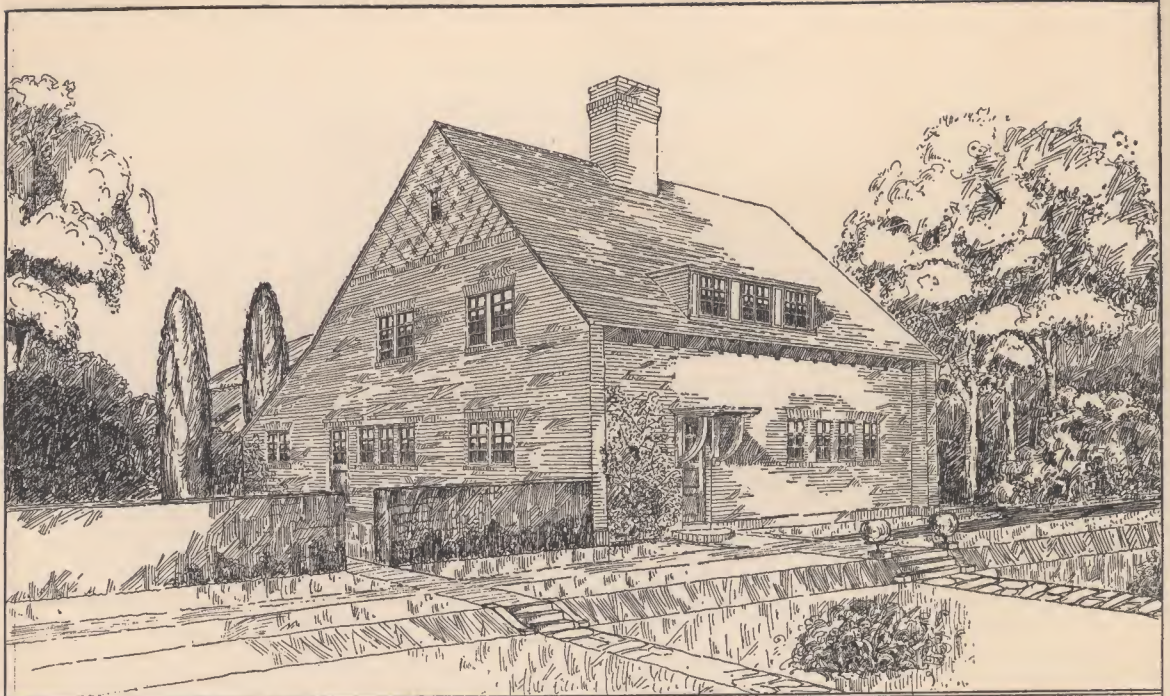
MAIN HOUSE	38 x 26 x 32 =	
	31616 CU. FT. X 22 CTS.	695.552
MAIN PORCH	(25 x 10 x 10) + 4 =	
	650 CU. FT. X 22 CTS.	137.50
DINING PORCH	(10 x 10 x 10) + 4 =	
	250 CU. FT. X 22 CTS.	55.00
KITCHEN EXT.	10 x 15 x 10 =	
	1500 CU. FT. X 22 CTS.	330.00
TOTAL COST		7476.02

\$7500 HY-TEX BRICK HOUSE

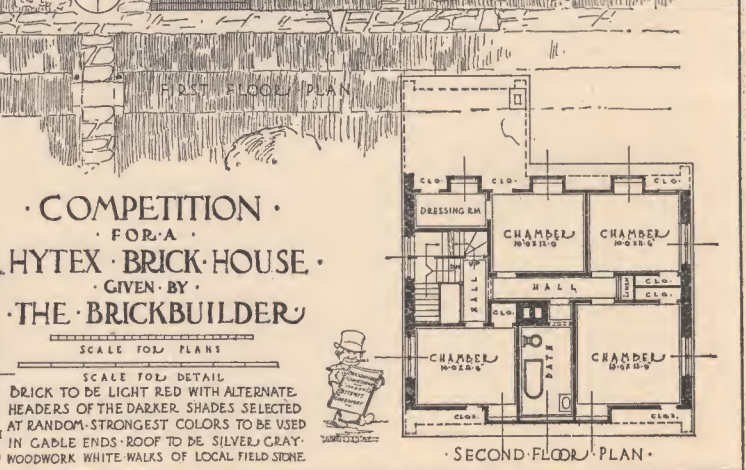
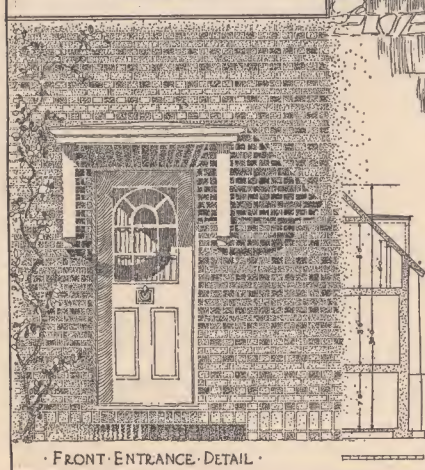
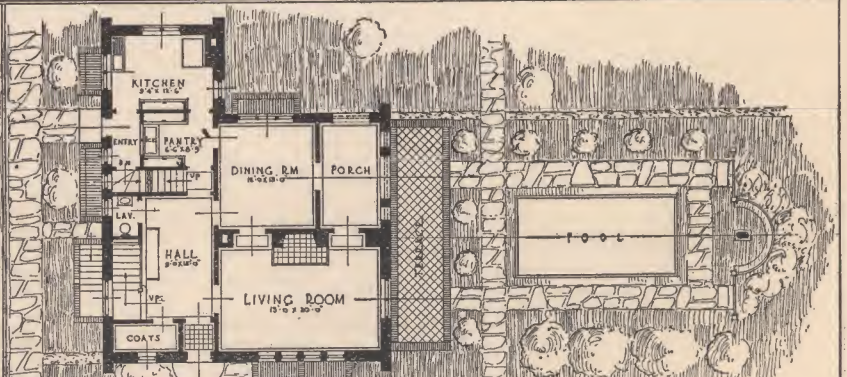


DESIGN BY AUGUST STEINKE AND OSCAR J. ARNEMANN
101 Park Avenue, New York, N. Y.

The Hy-tex House



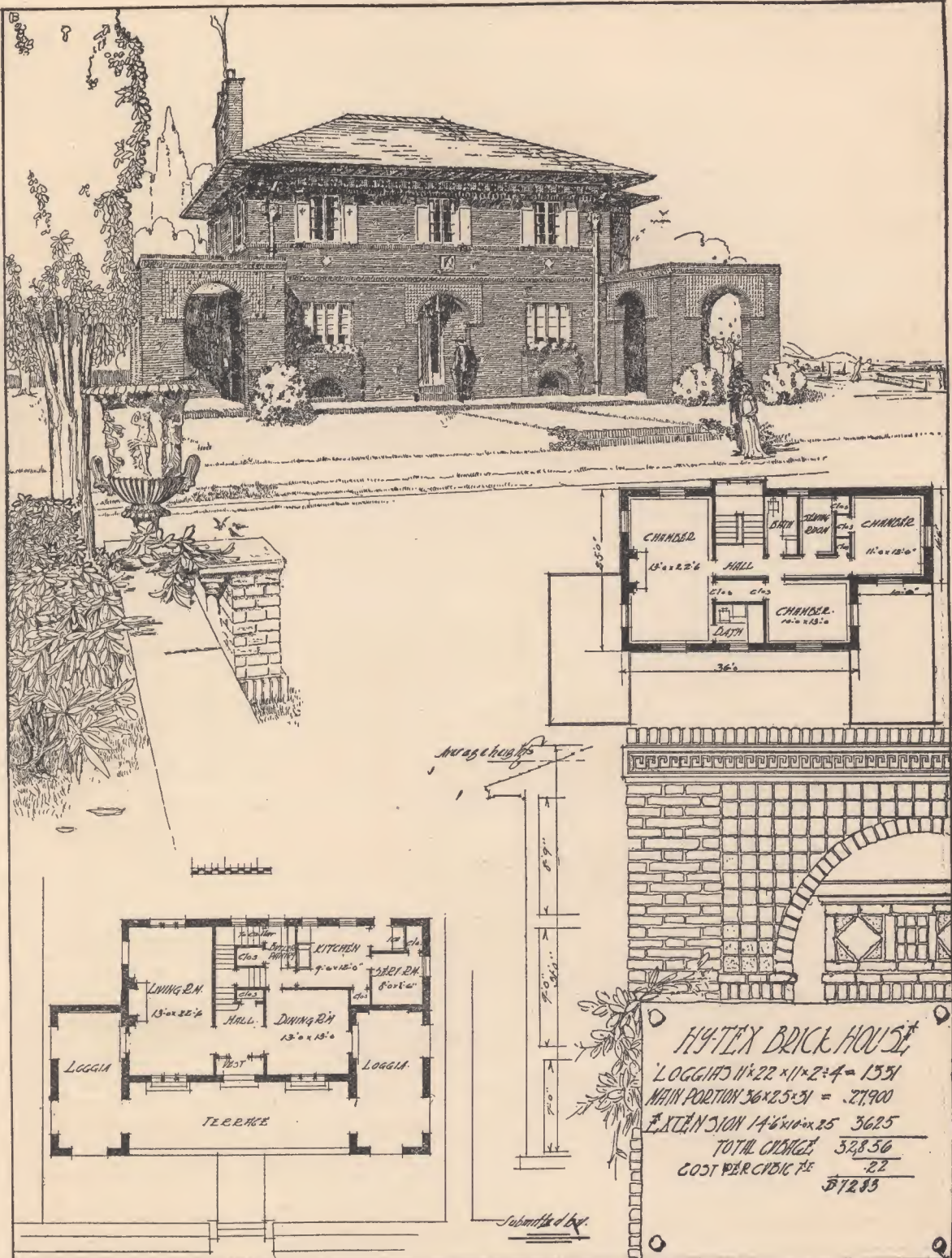
CUBAGE & COSTS
 MAIN BODY OF HOUSE 35'-8" X 30'-6" X 30'-0" IN HEIGHT = 32640 CV. FEET
 KITCHEN WING 15'-4" X 11'-0" X 14'-0" IN HEIGHT = 2366 CV. FT. TERRACE 28'-6" X 7'-6" X 3'-0" ÷ 4 = 153 CV. FT. SUBTRACTING 1600 CV. FT. FOR UNEXCAVATED PORTION UNDER LIVING ROOM VESTIBULE & COAT CLOS. EQVALS 33559 CV. FT. X 22 = \$7383.00 COST
 EXCAVATION 150 HEATING 650 PLASTERING 400 MASONRY 2700 PLYMING 550 SHEET METAL 150 LUMBER 900 WIRING 100 LIGHT FIXTURES 150 CARPENTRY 550 R. HARDW. 100 GAS PIPING 100 MILL WORK 500 F. HARDW. 150 PAINTING ETC 250 \$100 ALLOWANCE



• COMPETITION •
 • FOR A •
 HYTEX • BRICK HOUSE •
 • GIVEN BY •
 • THE BRICKBUILDER •

SCALE FOR PLANS
 SCALE FOR DETAIL
 BRICK TO BE LIGHT RED WITH ALTERNATE HEADERS OF THE DARKER SHADES SELECTED AT RANDOM. STRONGEST COLORS TO BE USED IN GABLE ENDS. ROOF TO BE SILVER GRAY. WOODWORK WHITE. WALKS OF LOCAL FIELD STONE.

DESIGN BY LEWIS P. MACKENZIE AND WARNER A. EBBETS
 5750 Pine Street, Philadelphia, Pa.

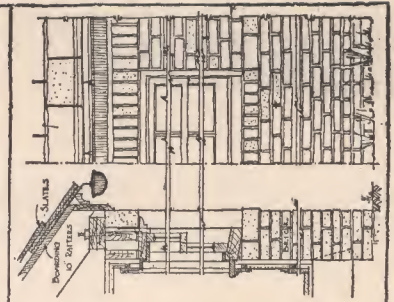
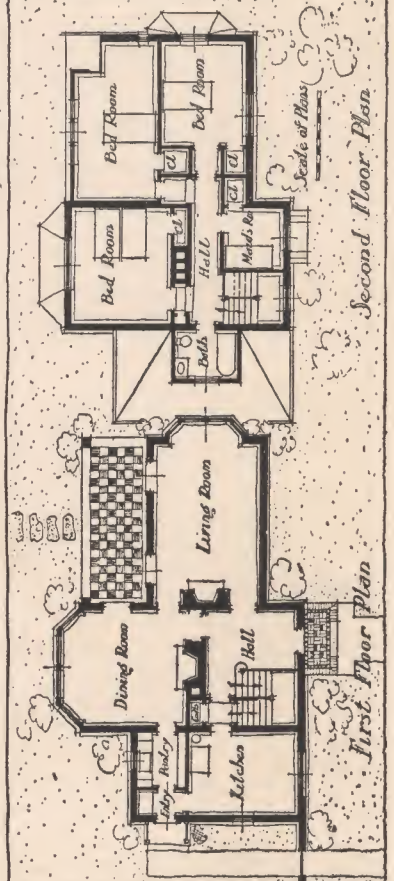


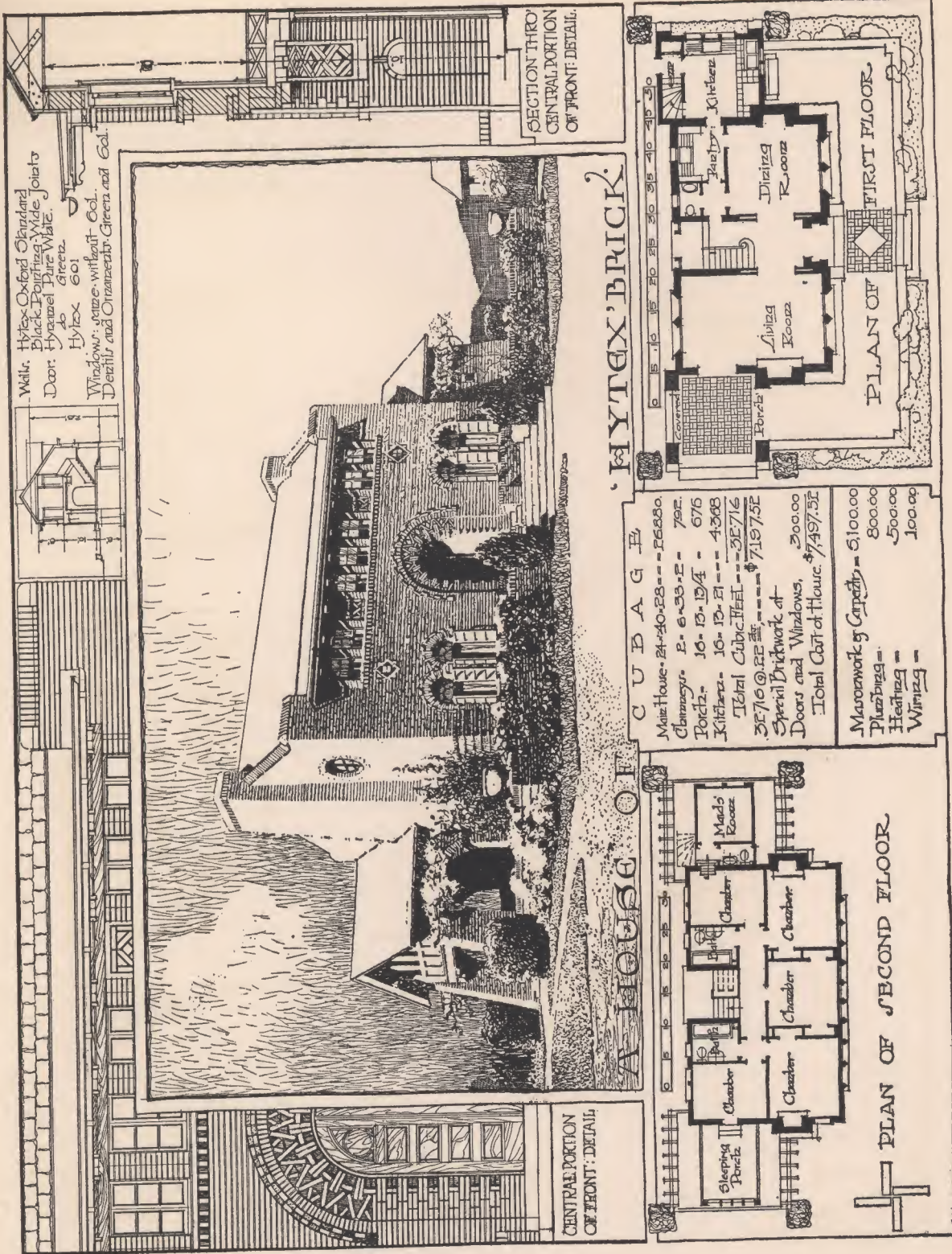
DESIGN BY EMIL H. KLEEMAN
 23 North 22d Street, Irvington, N. J.

The Hy-tex House



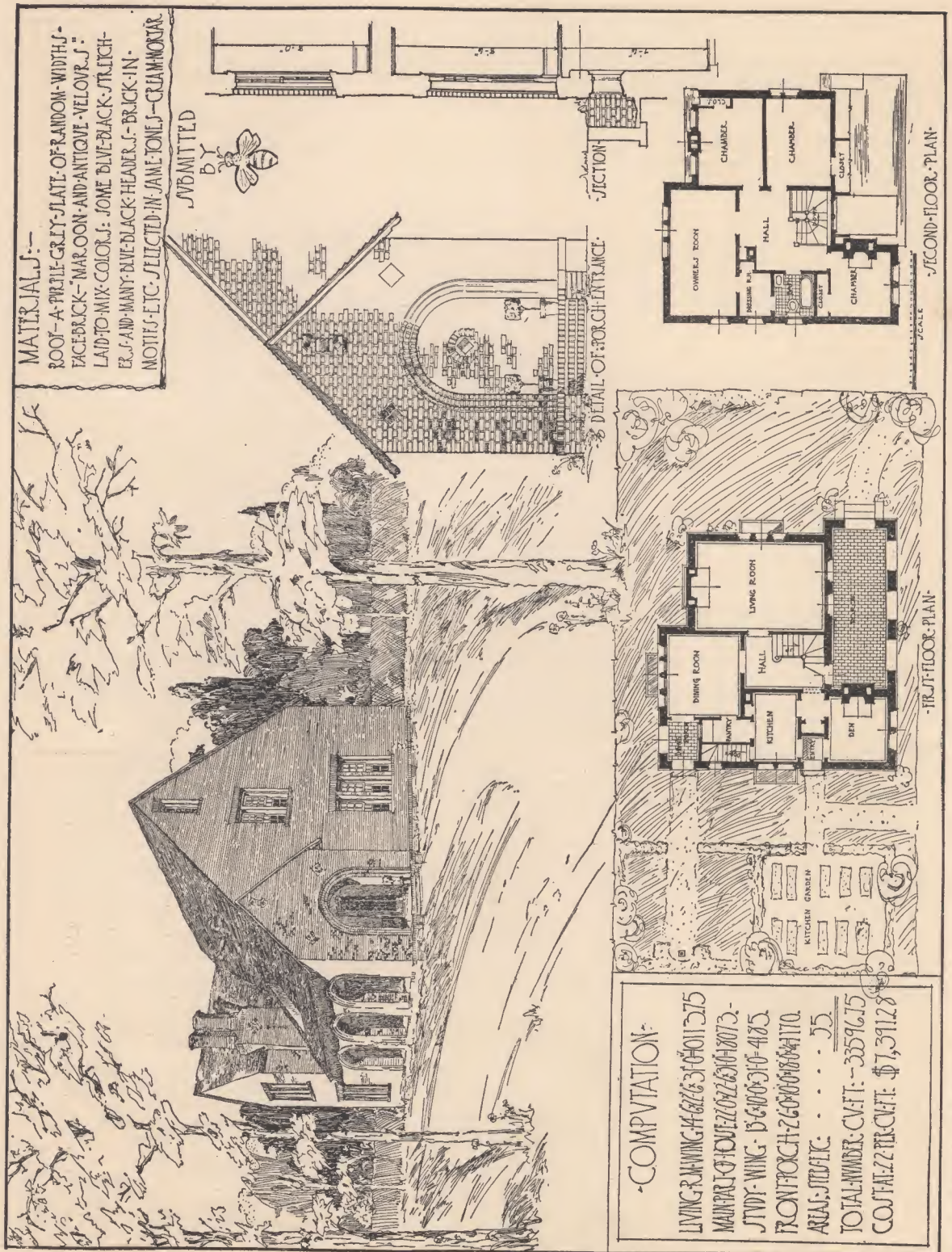
Cubage
 This cubage is taken
 in three parts &
 Living Rm portion - 6500
 Bed Rooms over L.R. - 5000
 Centre D.R. Portion - 15800
 Kitchen Wing - 5600
 Porches - 520
 Making a total of 33120
 cubic ft.

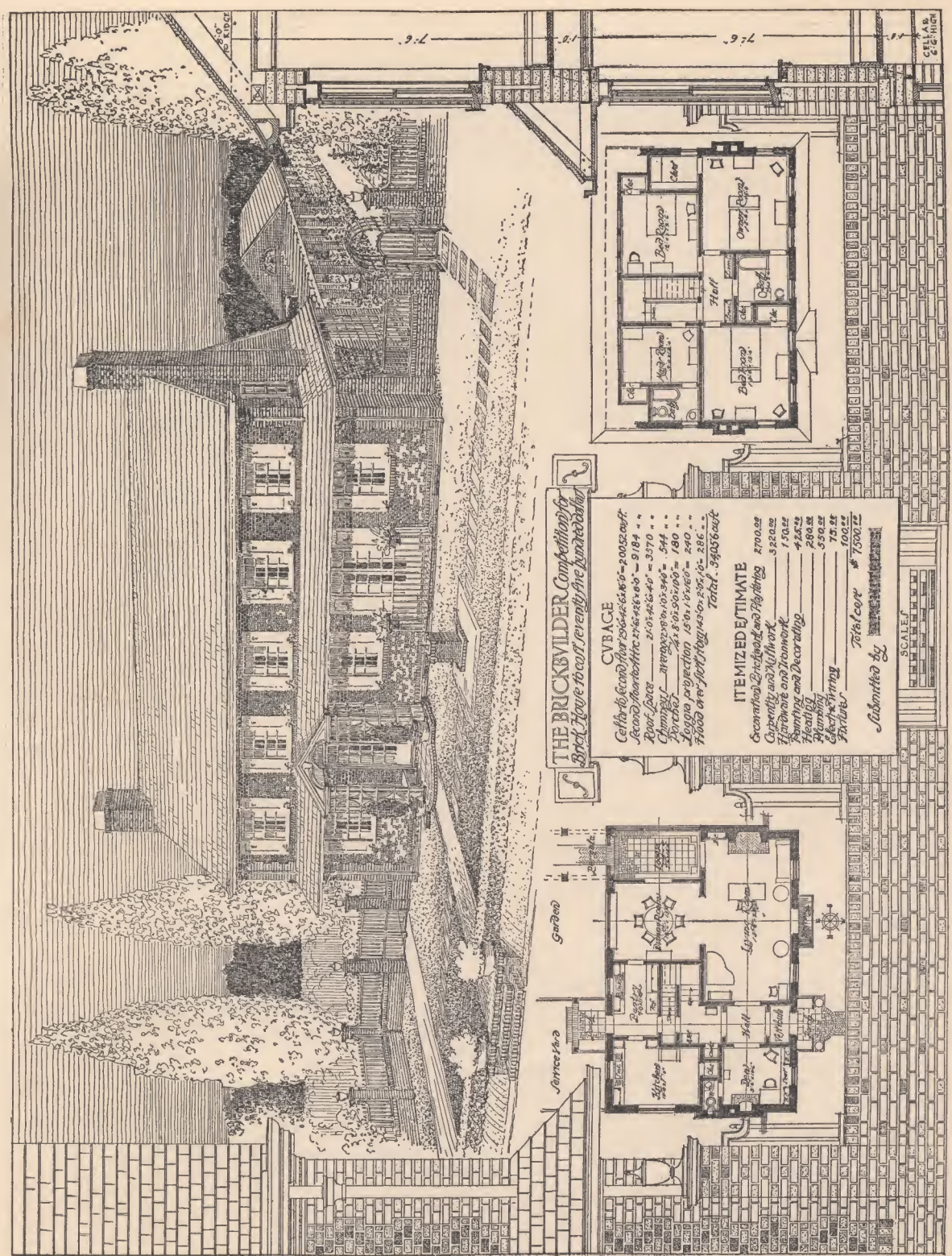




DESIGN BY ALFRED MORTON GITHENS
453 Fifth Avenue, New York, N. Y.

The Hy-tex House





THE BRICKVILDER Combination for
Brick House to cost seventy five hundred dollars

CYBAGE

Cells to be added for 1500-1600-2000 sq. ft.	
Second floor to be added for 1500-1600-2000 sq. ft.	9184
Roof space	3370
Chimney	544
Porches	180
Loggia projection	240
Floor area - net (1500-1600-2000 sq. ft.)	286
Total	39056 sq. ft.

ITEMIZED ESTIMATE

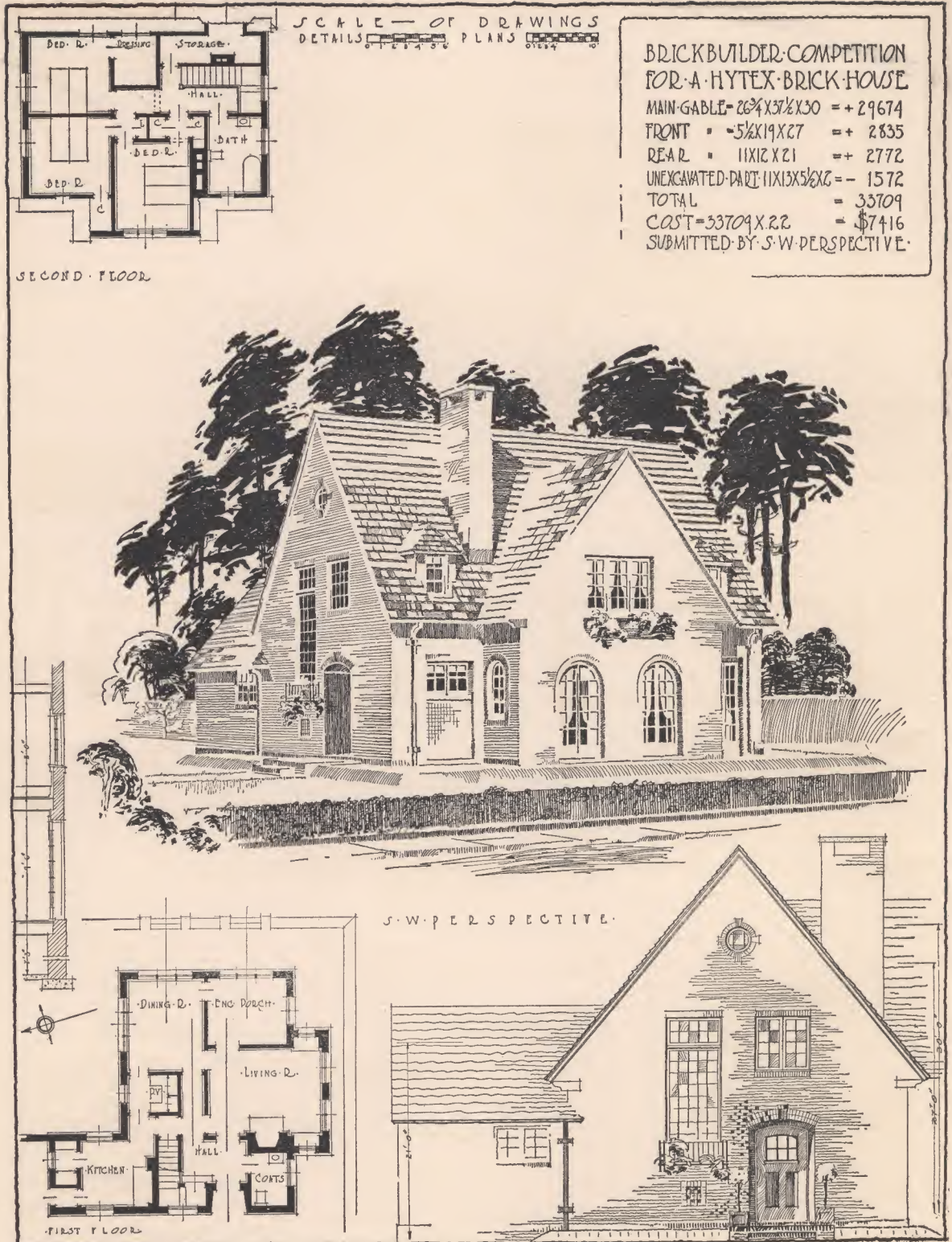
Construction, Discharge and Hydrant	2700.00
Capacity and Work	3200.00
Hardware and Trimwork	1500.00
Headings and Decorative	400.00
Plumbing	550.00
Electric Wiring	75.00
Finishes	100.00
Total cost	\$ 7300.00

Submitted by

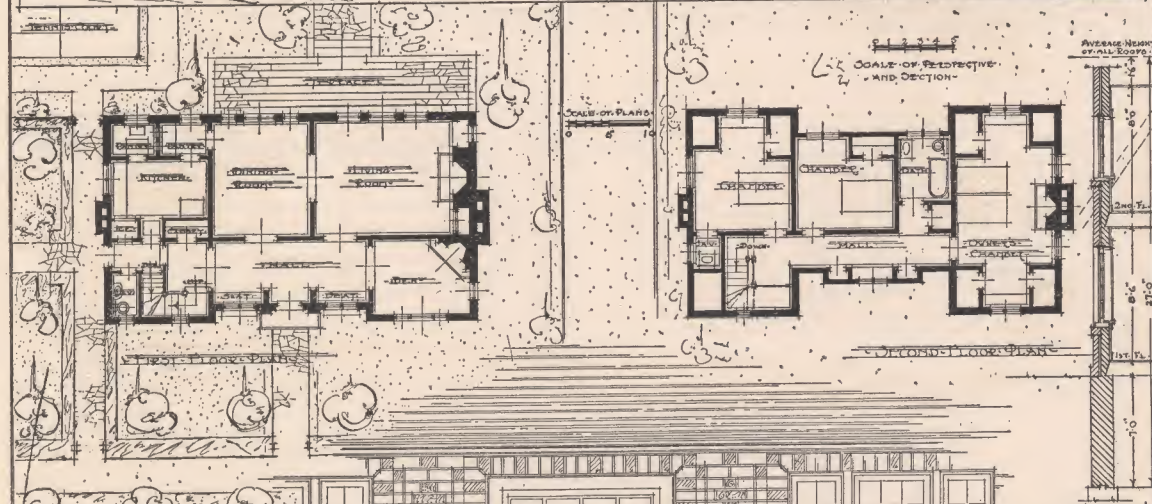
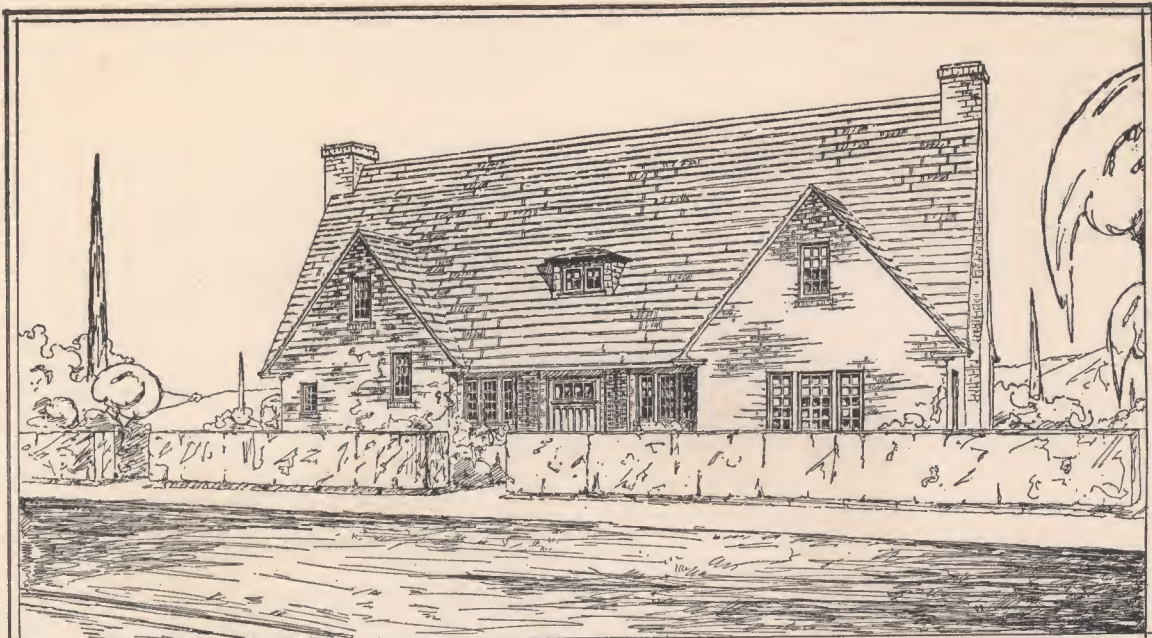
SCALE

DESIGN BY DAVIS, McGRATH AND KIESSLING
175 Fifth Avenue, New York, N. Y.

The Hy-tex House



DESIGN BY H. W. FEEBLES
Building Department, City Hall, Seattle, Wash.



CRITICAL CONTENTS

* * *
 FLOOR AREA: $41 \times 26 = 1066$ SQ. FT.
 CUBAGE: $1066 \times 27 = 28782$ CU. FT.
 PERIMETER: $2 \times 41 + 2 \times 26 = 134$ FT.
 TOTAL: $28782 + 134 = 28916$

ITEMS OF COST

EXCAVATION	\$ 200
MASONRY & PLASTERING	2200
CARPENTRY	3100
PLUMBING & HEATING	925
PAINTING	200
LIGHTING & FIXTURES	500
HARDWARE	150
MISCELLANEOUS	125
TOTAL	\$7500

SUBMITTED BY

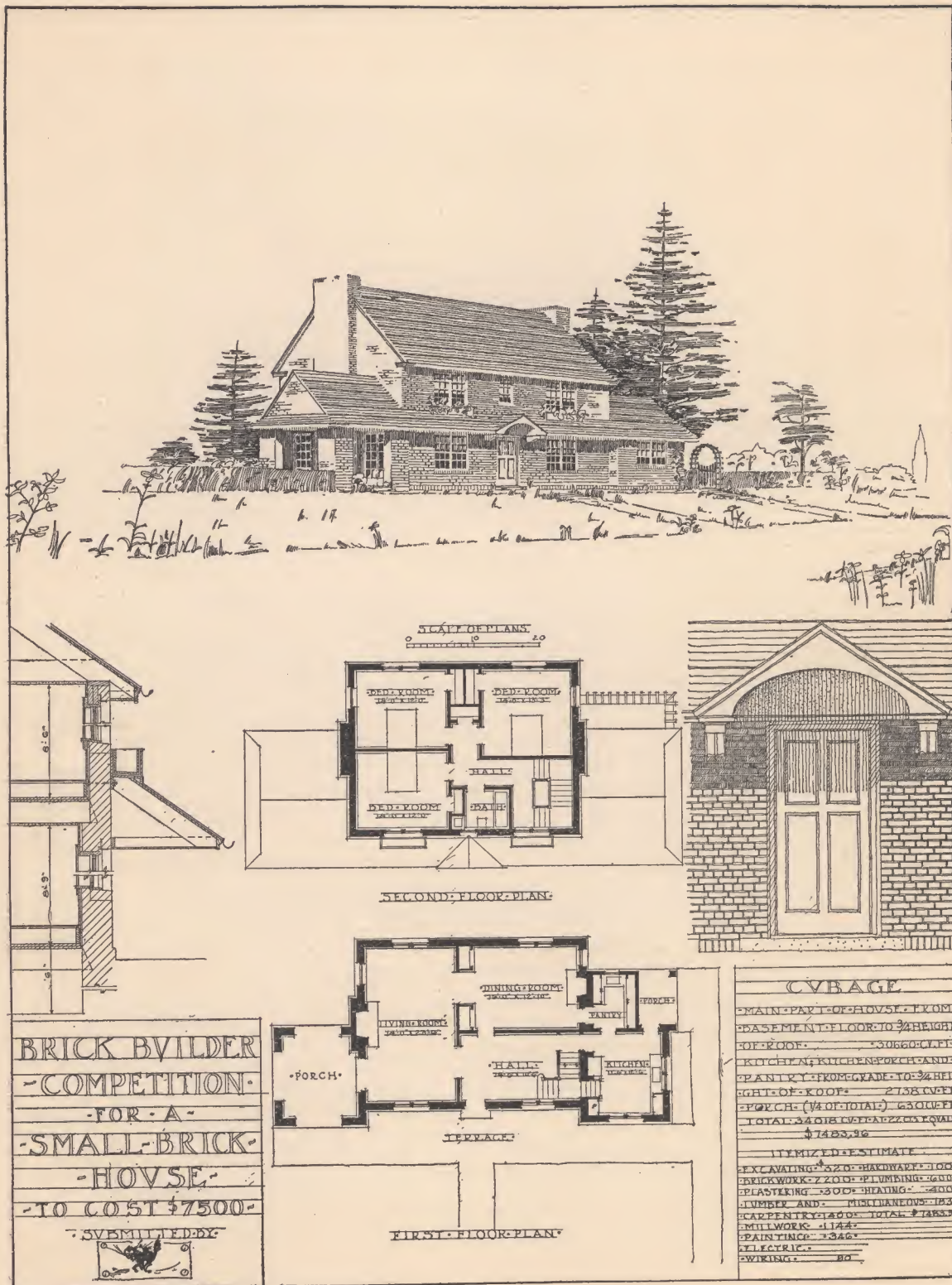
THE BRICKBUILDER'S COMPETITION

A \$1500 BRICK HOUSE

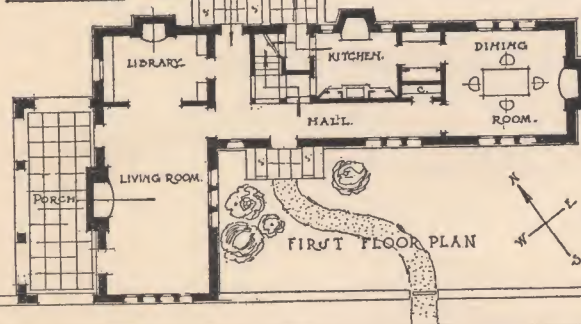
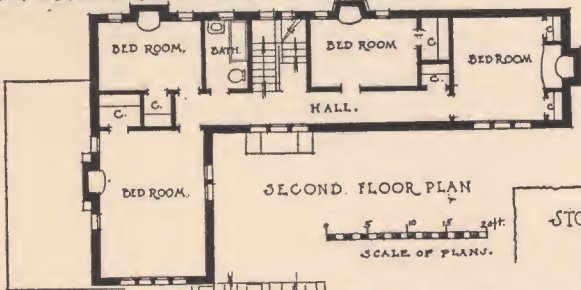
THE COLOR SCHEDULE

FOR BRICK SPECIFICATION INTERIOR
 10% DE. CON. METAL
 10% DE. 60% DARK OAK BROWN
 40% CON. METAL
 10% DE. 20% GOLDEN MOTTLED MAJ. &
 20% MEDIUM BROWN - THE MAIN
 PORTION OF HOUSE TO BE FACED
 WITH FLEMISH DOUBLE OVERLAP
 BOND OF MIXED BROWN SHADES

The Hy-tex House



DESIGN BY F. G. BRUTON
Forbes and Halket Streets, Pittsburg, Pa.



STORY HEIGHTS (FLOOR TO FLOOR)
 BASEMENT. — 8'-0"
 FIRST. — 9'-4"
 SECOND (CLEAR) — 8'-0"

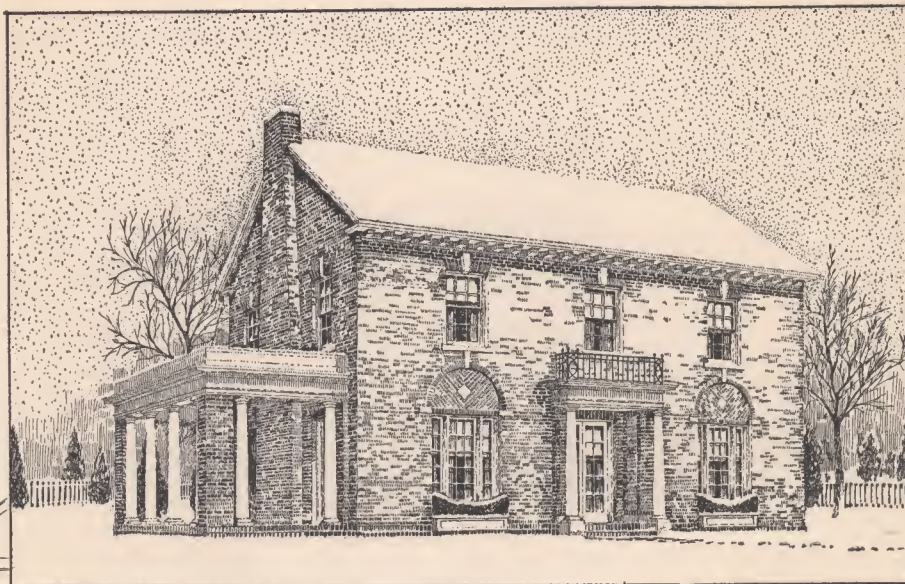
CVDAGE,
 MAIN BUILDING,
 $60' \times 15' \times 30' = 27,000$ cu ft
 LIVING RM. WING,
 (NO BASEMENT) $19' \times 15' \times 22' = 6,270$
 PORCH,
 $25' \times 10' \times 12' \div 4 = 750$
 CU FT. 34,020
 $34,000$ CU FT AT $2.2 = 7,484.0$



COMPETITION FOR A BRICK HOUSE TO
 COST SEVENTY FIVE HUNDRED DOLLARS.

DESIGN BY NORMAN BIARD BAKER
 16 Ingram Street, Forest Hills Gardens, L. I., N. Y.

The Hy-tex House



THE BRICKBUILDER COMPETITION FOR A HOUSE TO BE FACED WITH HYTEX BRICK FOR SEVEN THOUSAND FIVE HUNDRED DOLLARS . . .

SUBMITTED BY
ZERO

THE CUBAGE

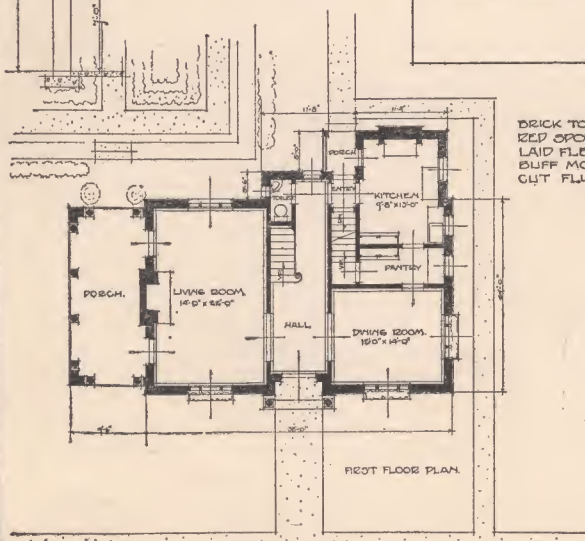
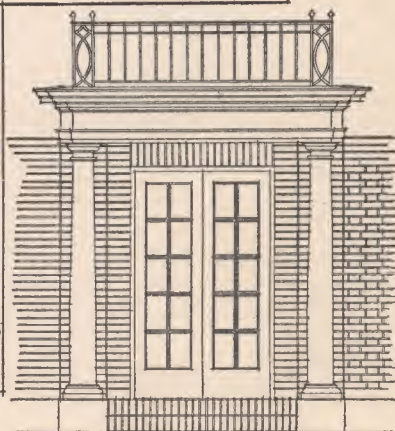
MAIN PART OF HOUSE
24' x 28' x 32'-0" + 35' x 23' x 32'-0" + 14' x 5' x 32'-0" = 4267.33.
1000 UNEXCAVATED PORTION UNDER
LIVING ROOM. 8' x 15' x 3' = 1080.

PORCHES
22' x 9' x 10' + 5' x 4' x 15' + 2' x 5' x 10' + 4' = 796.8

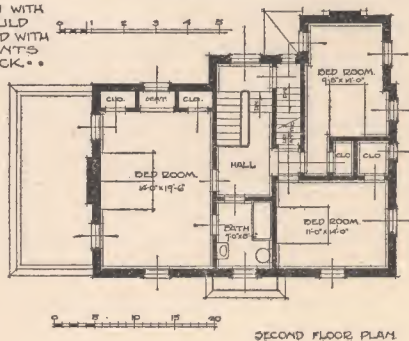
TOTAL COST 33964.03 @ 22¢ = 7476.49

ITEMS OF COST.

EXCAVATION	175.00
BRICKWORK	2200.00
PLASTERING	300.00
LUMBER AND CARPENTER WORK	2500.00
PAINTING	225.00
HARDWARE	100.00
ELECTRIC WIRING	75.00
PLUMBING	500.00
HEATING	450.00
MISCELLANEOUS	975.00
	7500.00



BRICK TO BE BROWN WITH
RED SPOT SAND MOUND
LAID FLEMISH BOND WITH
BUFF MORTAR. JOINTS
CUT FLUSH. 1/2" THICK.

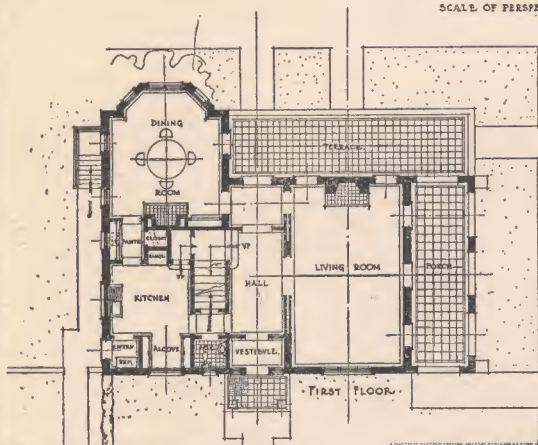


DESIGN BY H. PHILLIP BARTLETT
824 North Tacoma Avenue, Indianapolis, Ind.

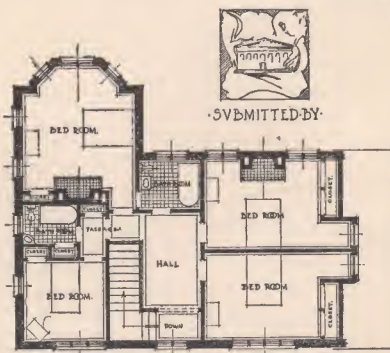
The Hy-tex House



SCALE OF PERSPECTIVE 1" = 8'



FIRST FLOOR

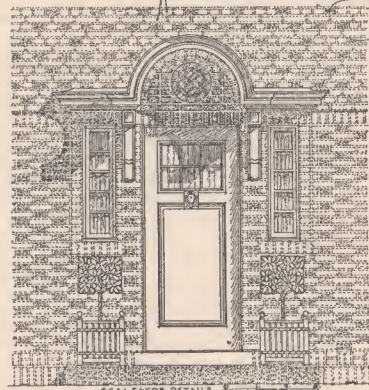


SECOND FLOOR

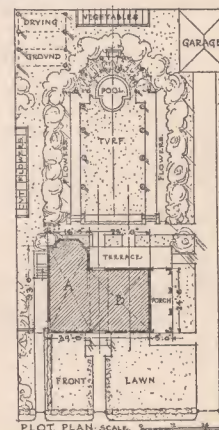
SCALE FOR PLANS 1" = 8'

SUBMITTED BY

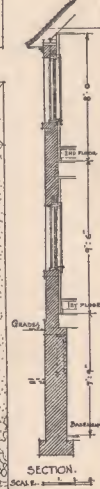
COLOR SCHEME—HOUSE TO BE FACED WITH RED BOKHARAS WITH STEEL BLACK HEADERS



SCALE FOR DETAILS 1" = 1'



1" = 8'



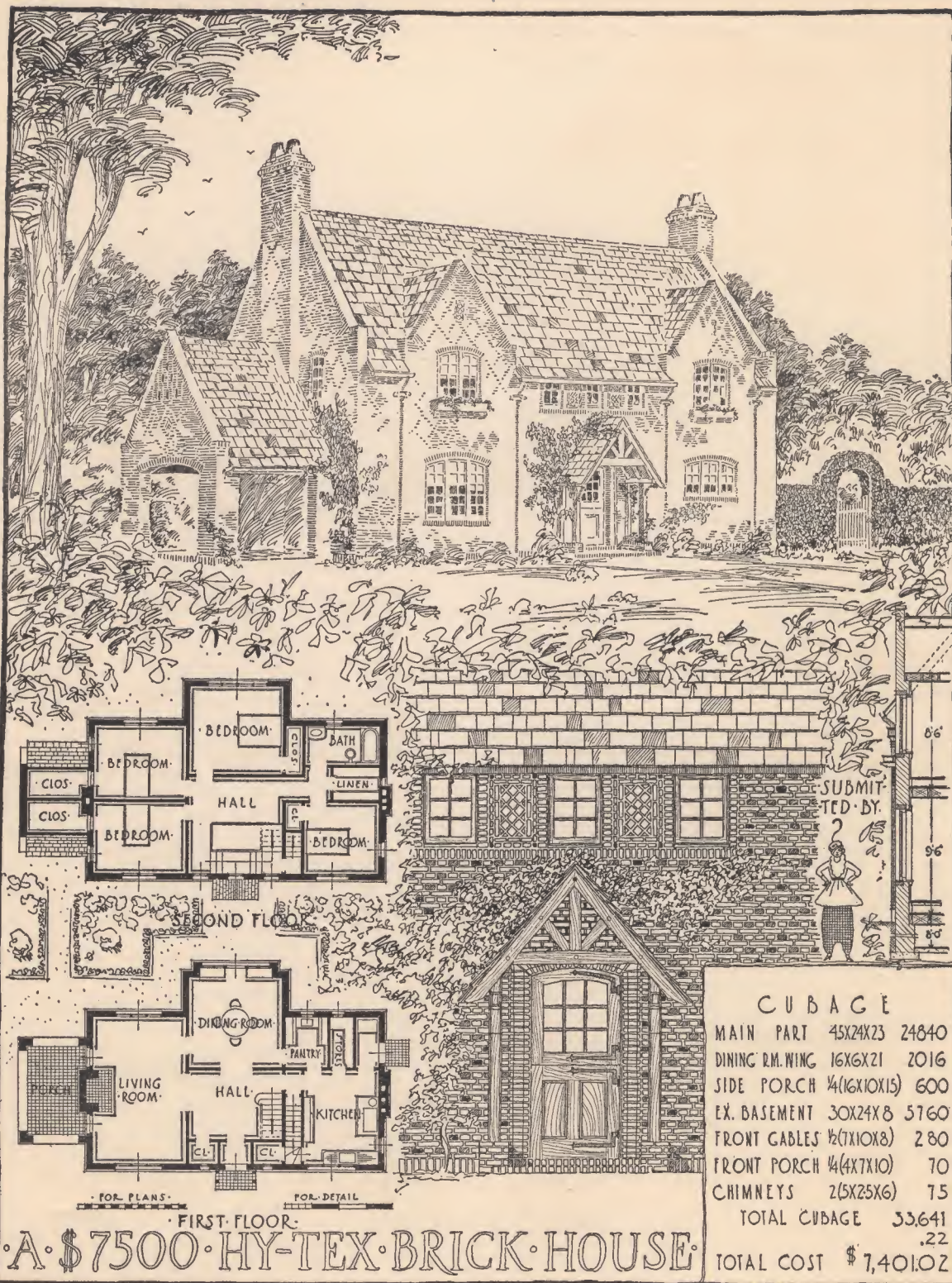
SECTION SCALE 1" = 8'

CVBAGE	
SEE PLOT PLAN	
NOTE—BASEMENT ONLY	
UNDEP. SECTION MARKED	
"A" 16'x35'x31" HIGH = 16368"	
SECTION MARKED	
"B" 23'x24.5'x25" HIGH = 14088"	
PORCH 8'x24.5'x12" = 2352"	
DAY WINDOW 5'x10'20" = 600"	
MISCELLANEOUS = 682"	
TOTAL— 34090"	
34090 AT \$22 CV. FT. \$7500.	

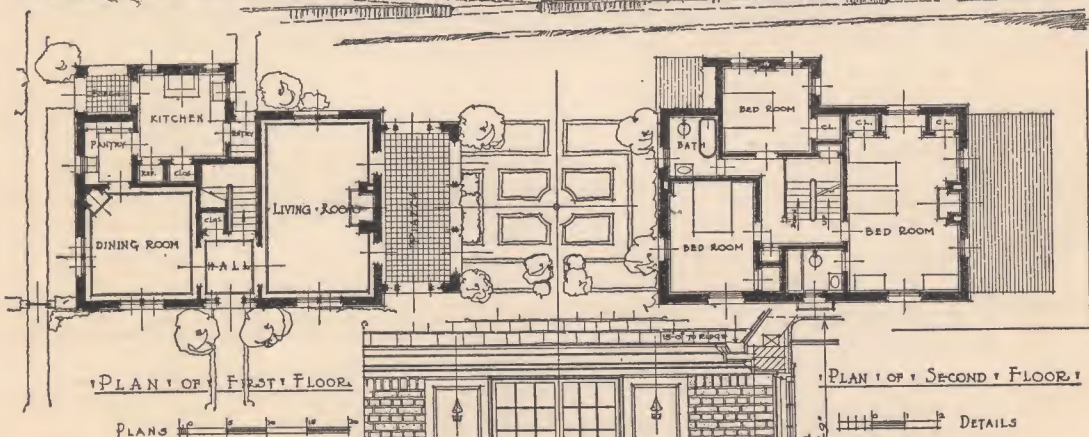
COMPETITION FOR A HY-TEX BRICK HOUSE TO COST \$7500

DESIGN BY CLARENCE M. BOGIA
5833 Washington Avenue, West Philadelphia, Pa.

The Hy-tex House



DESIGN BY A. C. FRANK AND LAWRENCE C. LIGHT
4 East 39th Street, New York, N. Y.



• CUBAGE •

• MAIN PART 24x38x33.5' = 30552
 • REAR WING 6x13x29' = 2262
 • PIAZZA 10x21x14' + 4 = 735
 • PORCH 6x7x16' + 4 = 168
 • TOTAL CUBIC FEET 33717
 • AT 22¢ PER CUBIC FT. \$7417.74

• ITEMIZED COST •

• EXCAVATION \$ 200.00
 • MASON 2530.00
 • CARPENTER 2637.00
 • HARDWARE 185.00
 • PAINTING 350.00
 • PLUMBING & METAL WORK 900.00
 • HOT AIR HEATING 425.00
 • ELECTRIC WORK 190.00
 • TOTAL \$7417.00

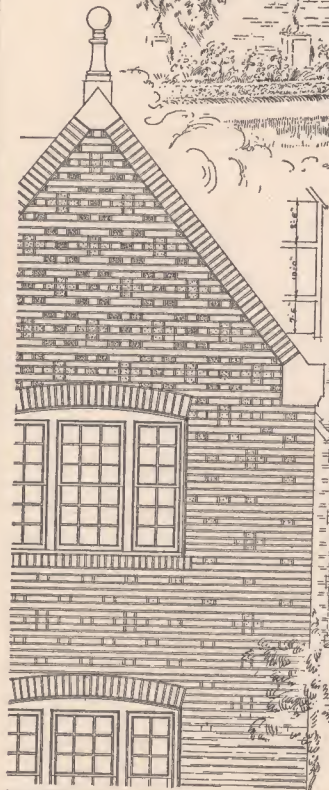
BRICKVILDER
 COMPETITION
 A BRICK HOUSE
 TO COST \$7500.
 WALLS FACED
 WITH HY-TEX
 BRICK

• BRICK TO BE BOKHARA
 • IN FULL RUN OF SHADES
 • LAID WITH 3/8" FLUSH JOINTS



The Hy-tex House

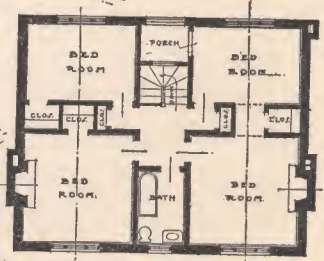
SUBMITTED BY



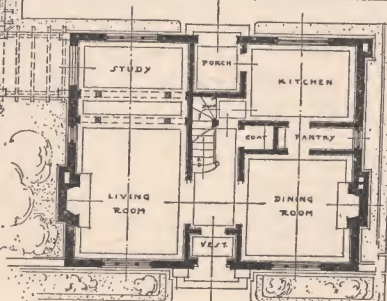
BRICKBUILDER COMPETITION
FOR A SEVEN THOUSAND
FIVE HUNDRED DOLLAR
BRICK HOUSE
SCALE
5/16" = 1'-0"

COST ITEMS

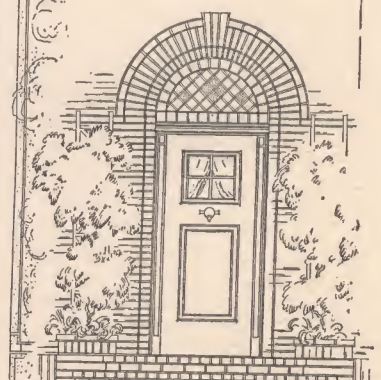
EXCAVATION	\$200.00
BRICKWORK	2850.00
PLASTERING	400.00
WOODWORK	1275.00
PAINTING	200.00
PLUMBING	325.00
ELECTRIC	75.00
HARDWARE	125.00
HEATING	350.00
ROOFING	800.00
ML/CELLANEOUS	1000.00
TOTAL	7500.00
CUBAGE: 37'x29'2"x31'	= 340.00
22¢ PER CU.FT.	22
TOTAL	7500.00



SECOND FLOOR

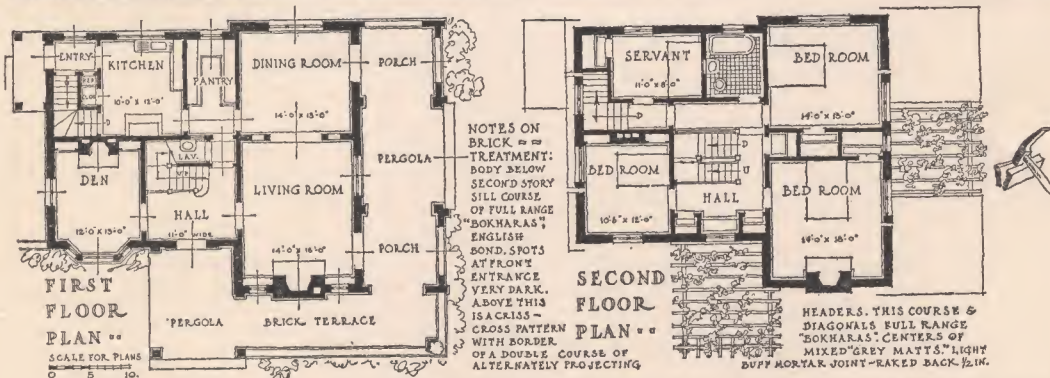


FIRST FLOOR

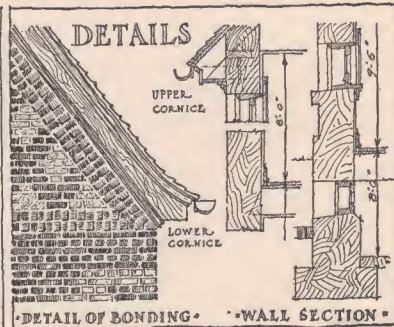
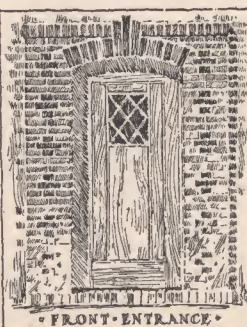


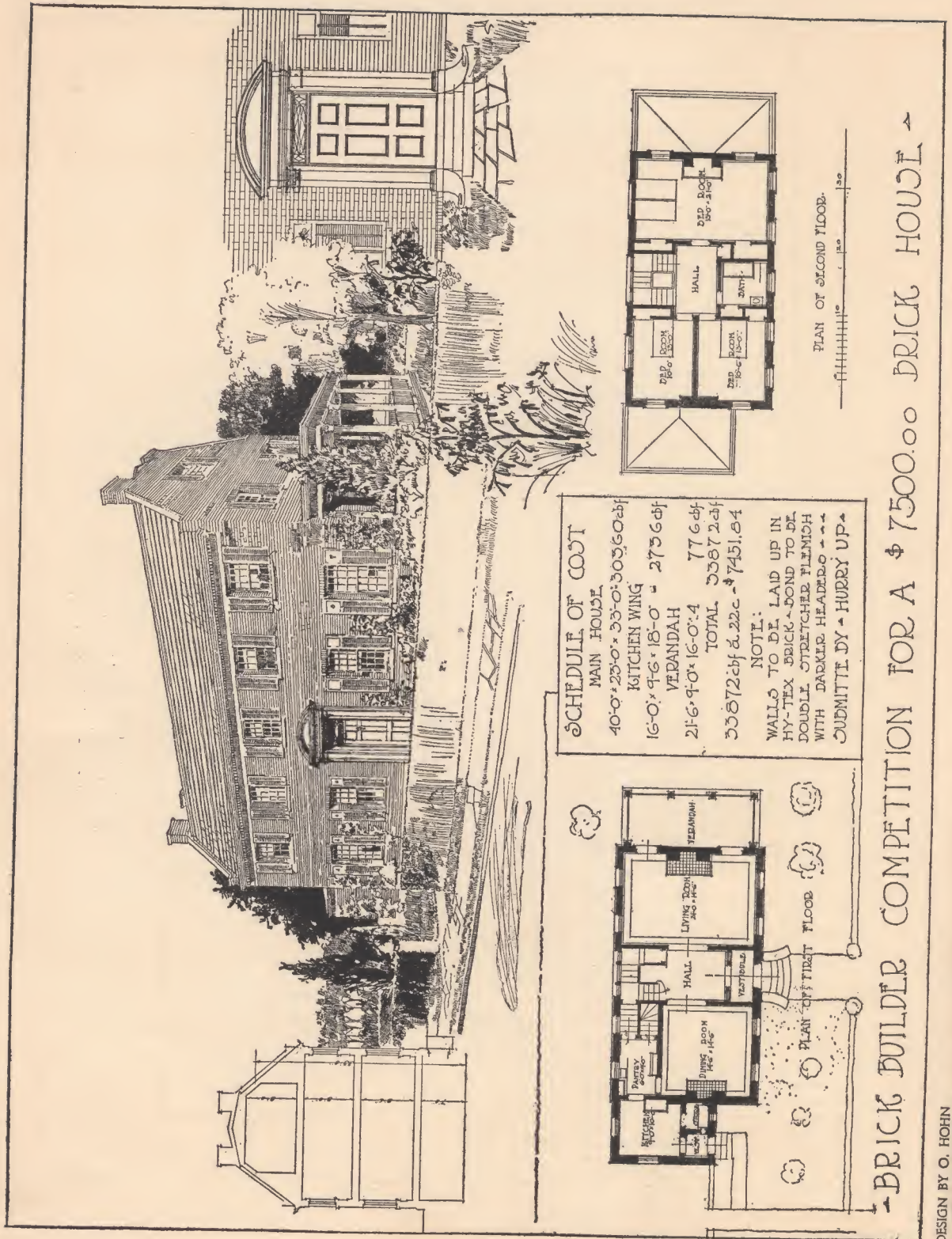
DESIGN BY EARL FREDERICK BANKES
548 Riverside Drive, New York, N. Y.

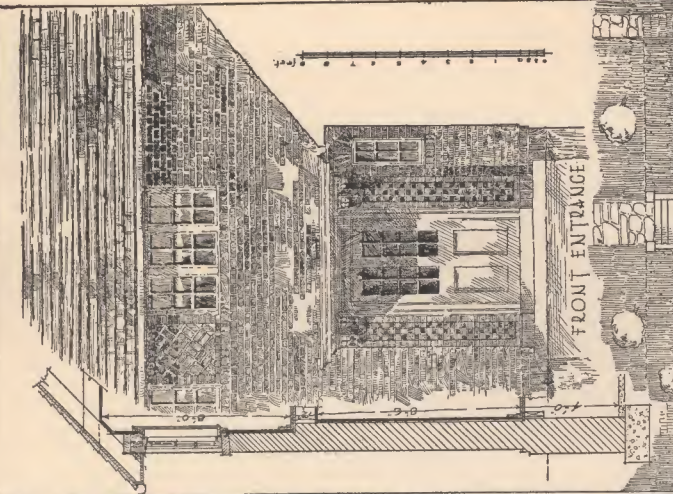
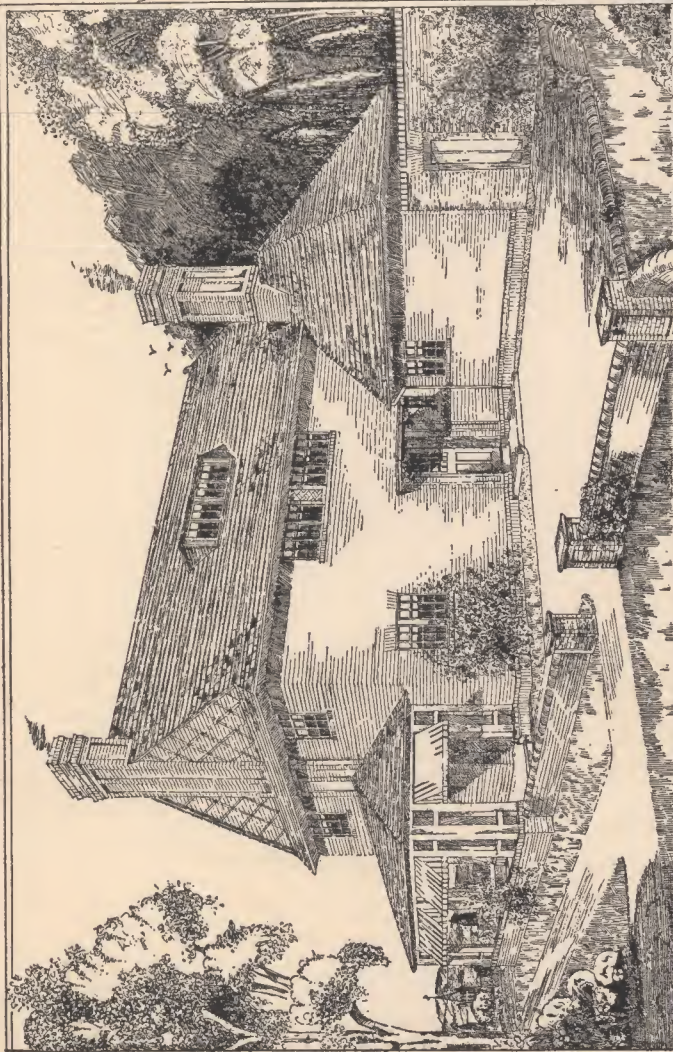
A HY-TEX HOME



COST DATA	
MATERIALS & LABOR	CUBIC CONTENTS
EXCAVATING 150	BASEMENT UNDER 23'x27' PORTION 4968
BRICK & MASONRY 1800	EXCAVATED SPACE UNDER 16'x21' PORTION 1984
MILL WORK 1430	FIRST STORY 10608
PLUMBING 610	SECOND STORY 8936
CARPENTRY & LUMBER 1700	ATTIC & ROOFS 5680
HEATING 450	PORCHES & TERRACE 1492
PLASTERING 590	TOTAL CUBAGE 33666
ELECTRIC LIGHTING 200	PER CUBIC FT. .22
HARDWARE & METAL 350	TOTAL COST \$7417.52
PAINTING 300	
MISCELLANEOUS 220	
COST COMPLETE \$7500	







CUBAGE

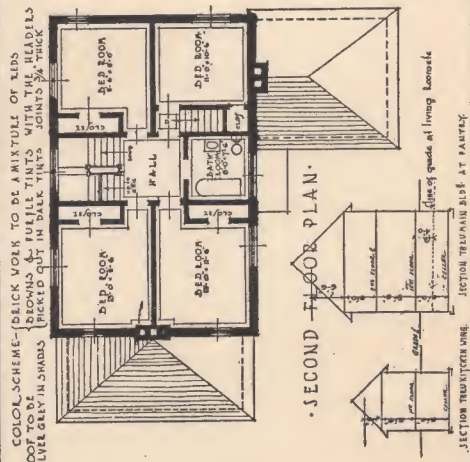
NOTE-BUILDING UNDER LIVING ROOM & HALL
DINING ROOM IS EXCAVATED 3' BELOW GRADE
AND GRADE COVERED WITH 3" OF CINDER
CONCRETE - CELLAR TO EXTEND UNDER KITCHEN
WIND 4 PARTLY OPEN.
MAIN BUILDING 39'-0" x 6" x 28'-0" = 28,210.
EXTRA DEPTH FOR MAIN BUILDING UNDER
PAINTS TO FORM CELLAR 12'-0" x 6" x 52'-0"
KITCHEN - VING. 12'-0" x 14'-0" x 20'-0" = 640
MAIN FLOOR 30'-0" x 10'-0" = 172.
CHIMNEY TOWER ON MAIN BUILDING 4'-0" x 4'-0"
ON KITCHENWING 3'-0" x 4'-0" x 10'-0"
TOTAL C.C. 33960

COSTS OF VARIOUS WOLKS

EXCAVATOR WORK 100.00 DRICK WORK 3000.00
LUMBER 900.00 CARPENTRY 600.00 MILLWORK
500.00 HEATING 600.00 PLUMBING 300.00
WIRING 100.00. BOLDWALE (ROUGH/FINISHED)
260.00 PLASTER WORK 400.00 SHEET METAL
15.00 LIGHT FIXTURES 350.00 GAS PIPING 100.00
PAINTER WORK 205.00 - 7450.00

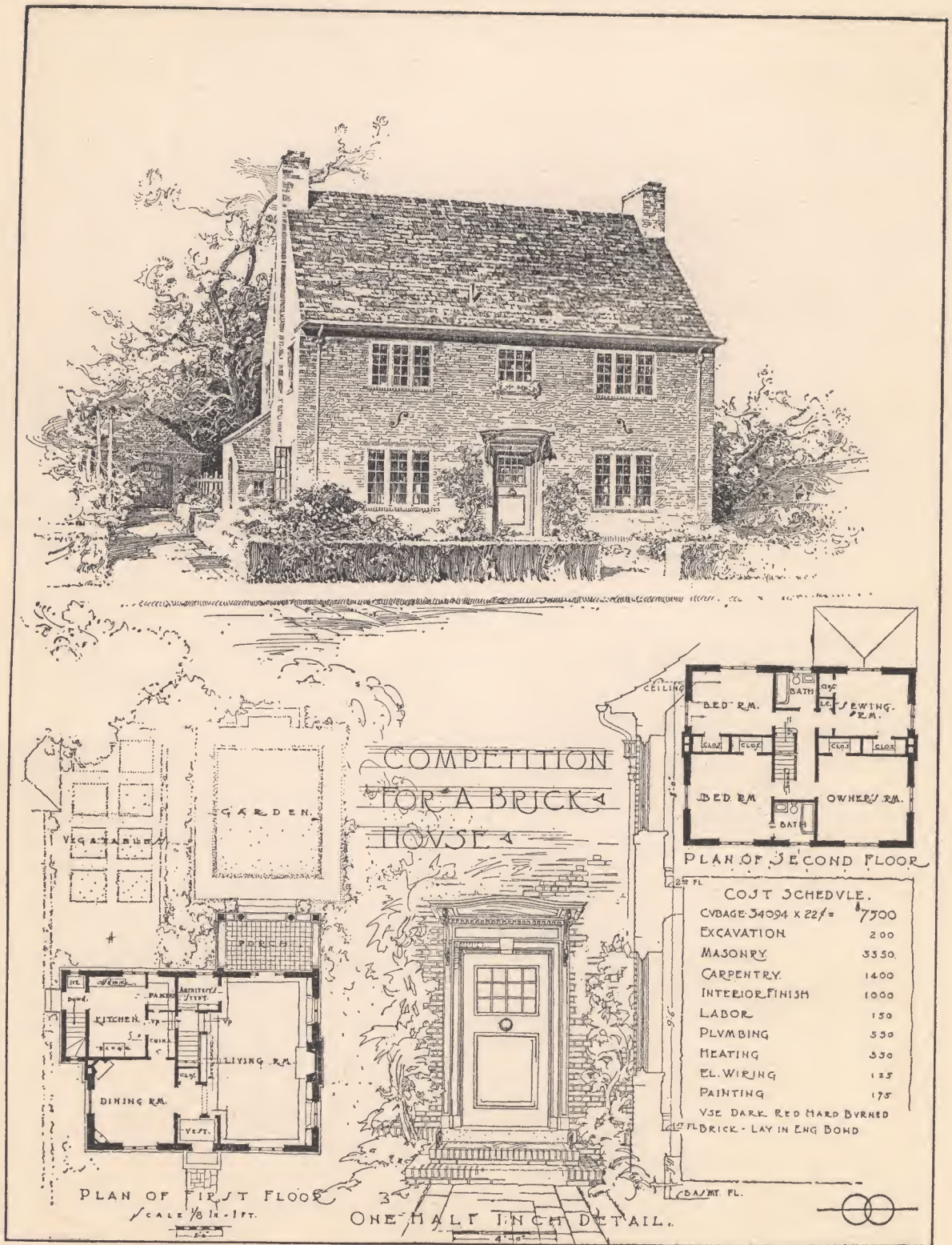
COMPETITION FOR A
7500.00 BRICK HOUSE.

FEBRUARY THE 10TH 1914

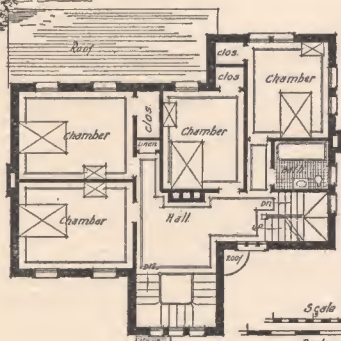


DESIGN BY LEWIS A. MACKENZIE
5750 Pine Street, Philadelphia, Pa.

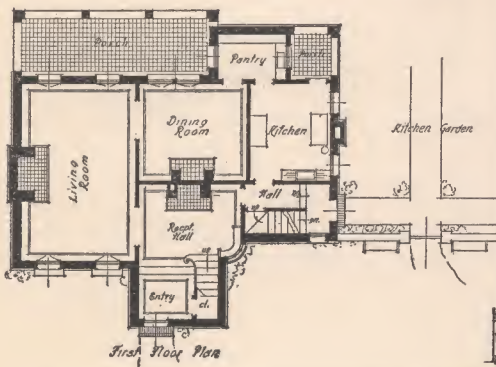
The Hy-tex House



DESIGN BY A. J. HARPER
 470 Fourth Avenue, New York, N. Y.



Second Floor Plan



First Floor Plan

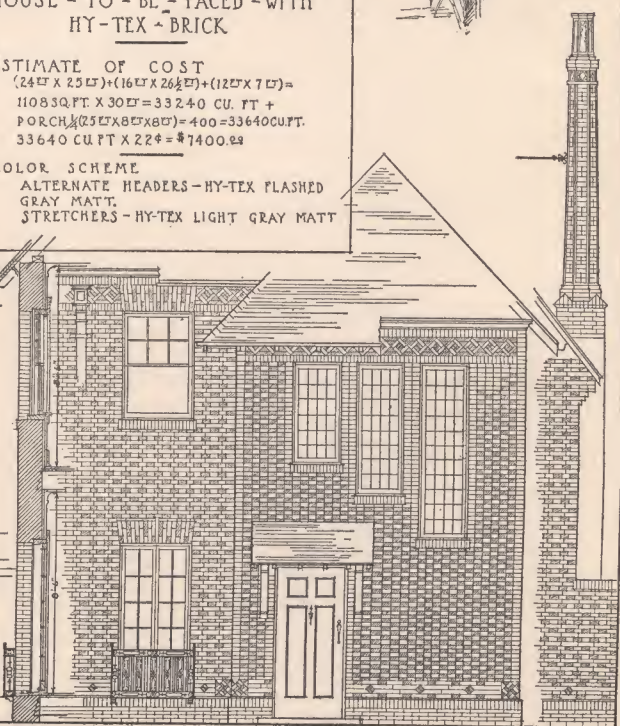
BRICKBUILDER - COMPETITION
HOUSE - TO - BE - FACED - WITH
HY-TEX - BRICK.

ESTIMATE OF COST
(24' x 25') + (16' x 26½') + (12' x 7') =
11083 Q. FT. x 30¢ = 33240 CU. FT. +
PORCH (25' x 8' x 8') = 400 = 33640 CU. FT.
33640 CU. FT. x 22¢ = \$7400.88

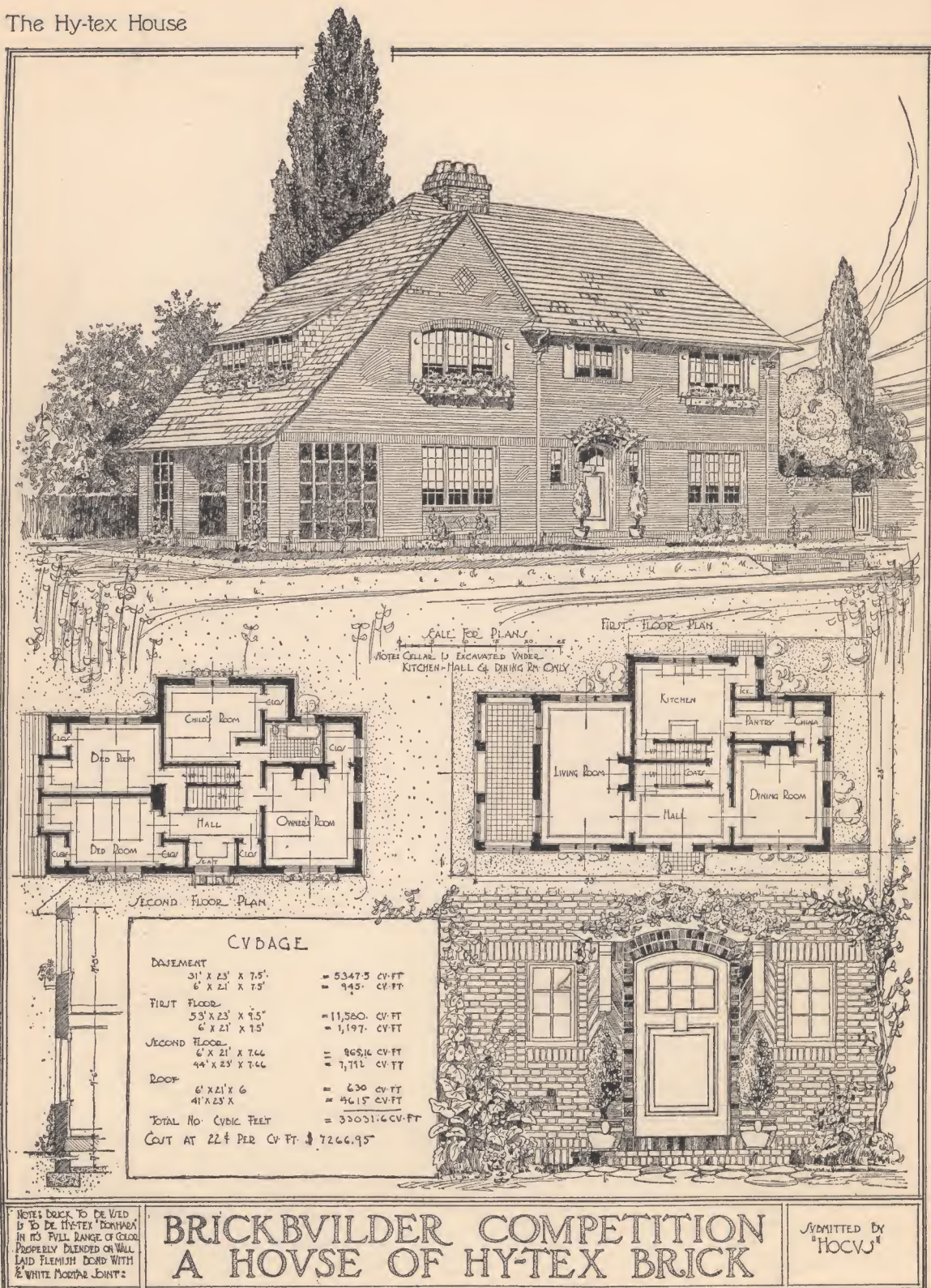
COLOR SCHEME
ALTERNATE HEADERS - HY-TEX FLASHED
GRAY MATT.
STRETCHERS - HY-TEX LIGHT GRAY MATT

Scale of Plans 1" = 10'

Scale of Details
SUBMITTED BY



The Hy-tex House



DESIGN BY WILLIAM J. MOONEY
110 State Street, Boston, Mass.

A HY-TEX BRICK HOUSE

TO COST NOT EXCEEDING \$7,500.00

THE BRICKBUILDER COMPETITION

FEBRUARY 10, 1914.

SUBMITTED BY

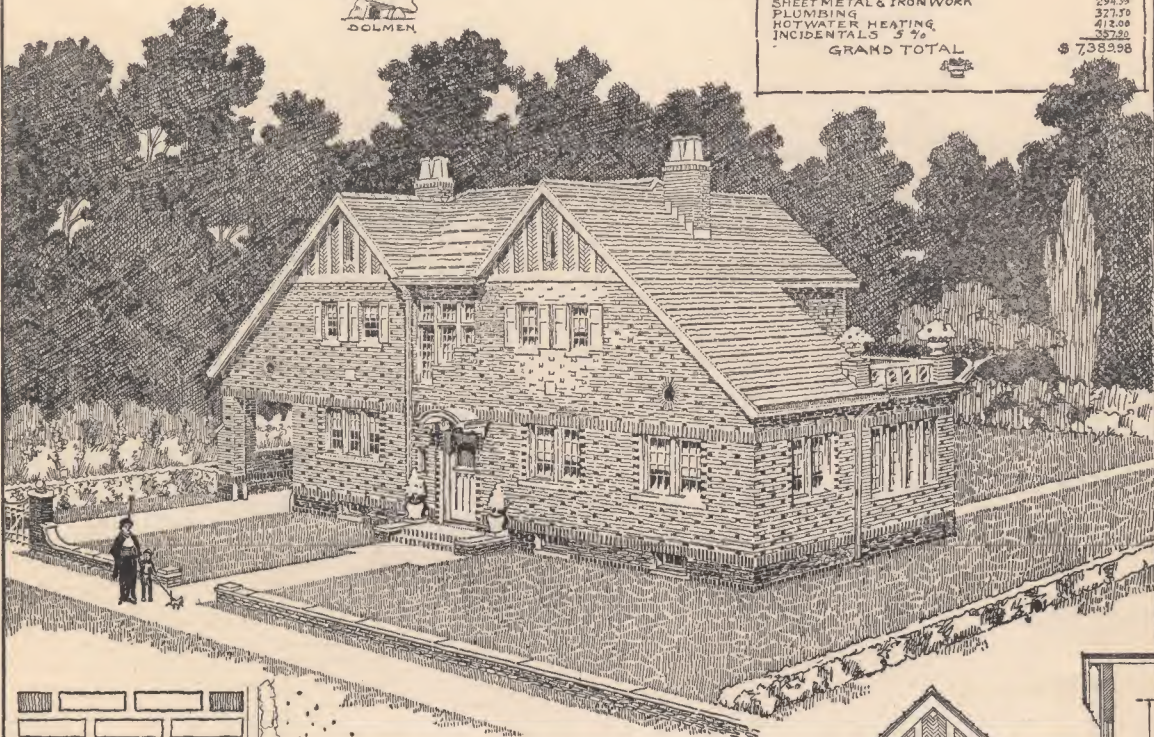


~ CUBICAL CONTENTS ~

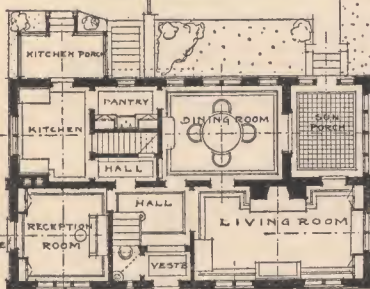
MAIN PART OF HOUSE	26'x35'x 3 1/2'	28575
SOUTH PART LIVING ROOM	10'x13'x 2 1/2'	2800
SUN PORCH	10'x12'x 14' ± 4	432
PORTE COCHERE	10'x13'x 16'6" ± 4	584
KITCHEN PORCH	6'x 11' x 13' ± 4	216
TOTAL CUBAGE		33607
33607 cu. ft. @ 22¢		= \$ 7393.54

ESTIMATE

EXCAVATION & MASON WORK	\$418.50
LUMBER	786.14
MILLWORK & GLAZING	1898.72
CARPENTER LABOR	673.70
PLASTERING	359.26
PAINTING	267.89
HARDWARE	156.57
SHEET METAL & IRONWORK	294.39
PLUMBING	277.50
HOT WATER HEATING	412.09
INCIDENTALS 5%	357.20
GRAND TOTAL	\$ 7389.98



DETAIL OF BRICK BOND



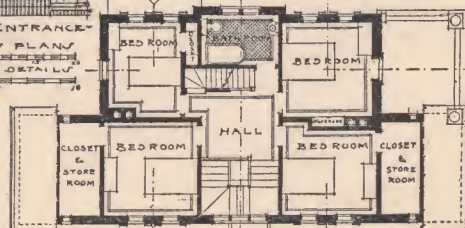
FIRST FLOOR PLAN



FRONT ENTRANCE
SCALE OF PLANS
1" = 1'-0"



TYPICAL GABLE



SECOND FLOOR PLAN



SECTION

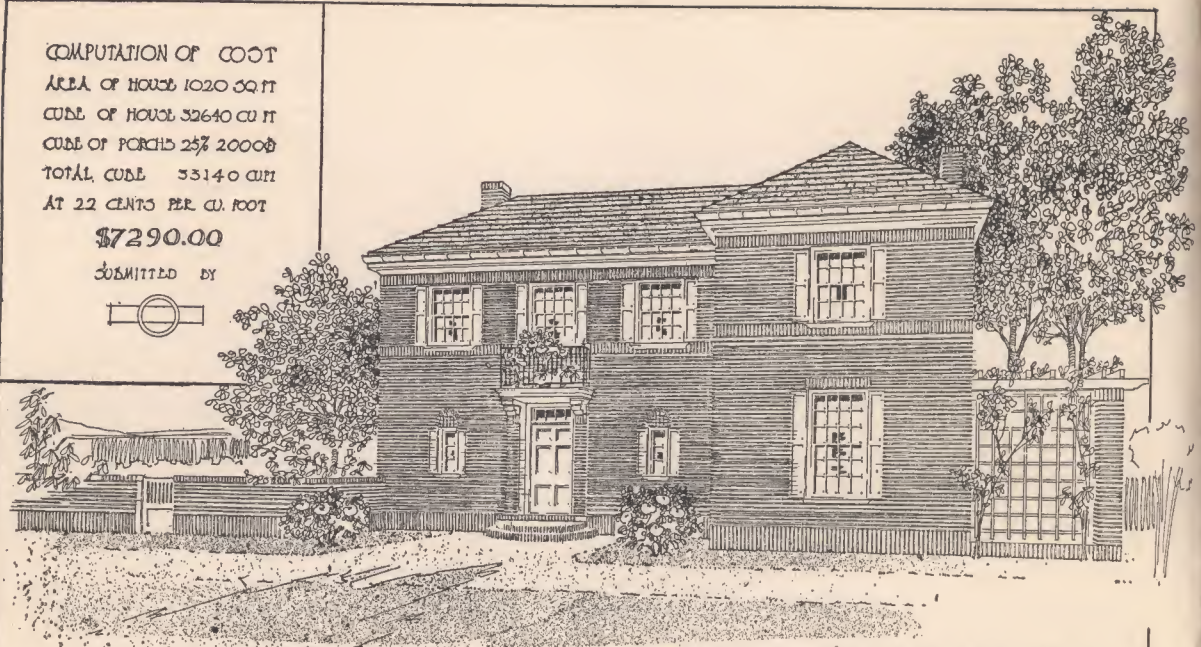
DESIGN BY GEORGE FULLER GREENE
424 Rialto Building, Kansas City, Mo.

The Hy-tex House

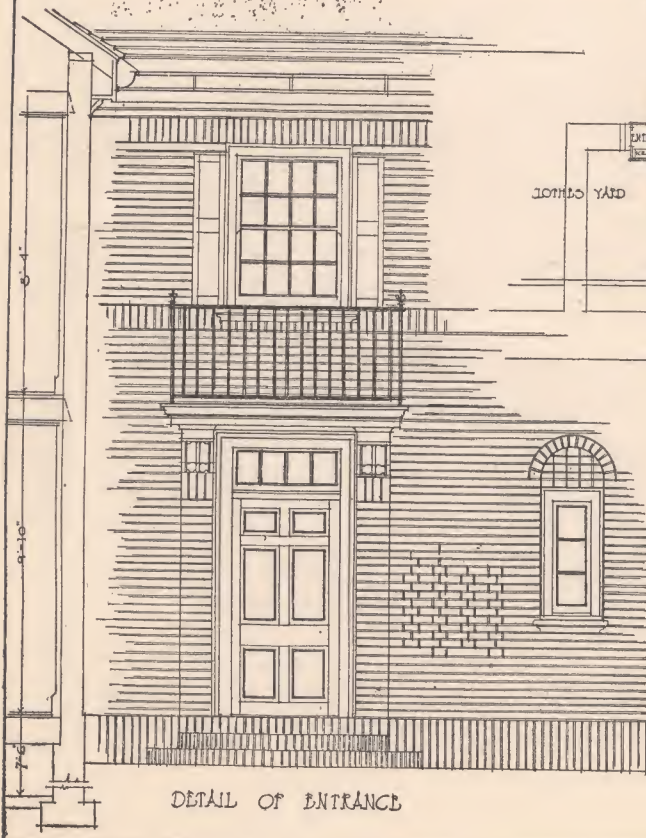
COMPUTATION OF COST
 AREA OF HOUSE 1020 SQ. FT.
 CU. OF HOUSE 32640 CU. FT.
 CU. OF PORCHES 25% 20000
 TOTAL CU. 53140 CU. FT.
 AT 22 CENTS PER CU. FOOT

\$7290.00

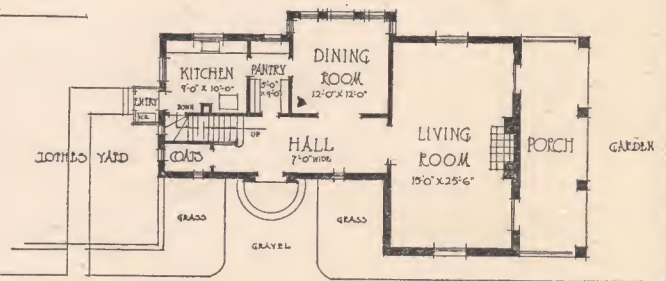
SUBMITTED BY



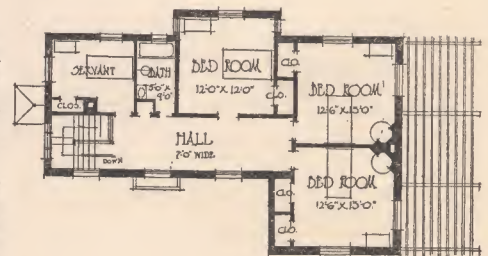
A 7500 DOLLAR HOUSE TO BE BUILT OF HY-TEX BRICK



DETAIL OF ENTRANCE



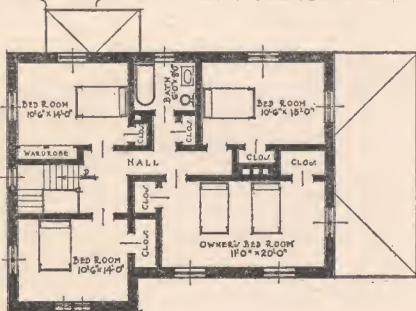
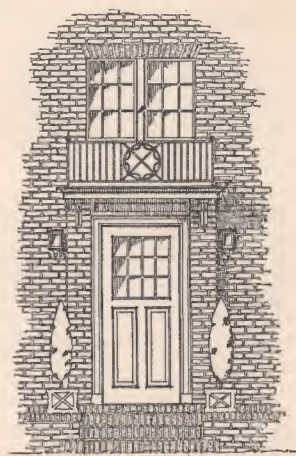
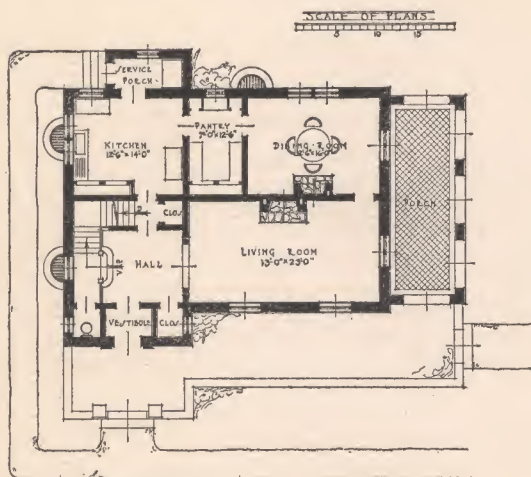
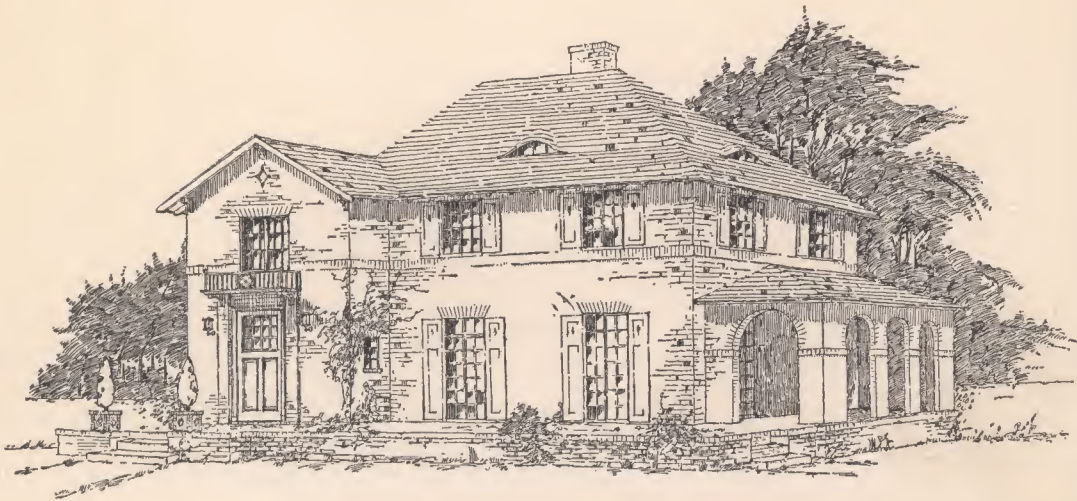
FIRST FLOOR PLAN



SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

DESIGN BY LOUIS SCHALK
 1135 Merchants Exchange Building, San Francisco, Cal.



CUBICAL CONTENTS OF HOUSE

MAIN HOUSE	40'0" x 28'0" x 30'0" =	33600
WING IN FRONT	6'0" x 4'0" x 21'0" =	1344
PORCH	(4'0" x 25'6" x 12'0") $\frac{1}{2}$ =	689
SERVICE WING	(0'6" x 4'8" x 12'0") $\frac{1}{4}$ =	147
AREAS CHIMNEY & STEPS		40
DEDUCTING FOR UNEXCAVATED		35820
PORTION ON RIGHT SIDE OF HOUSE		- 1730

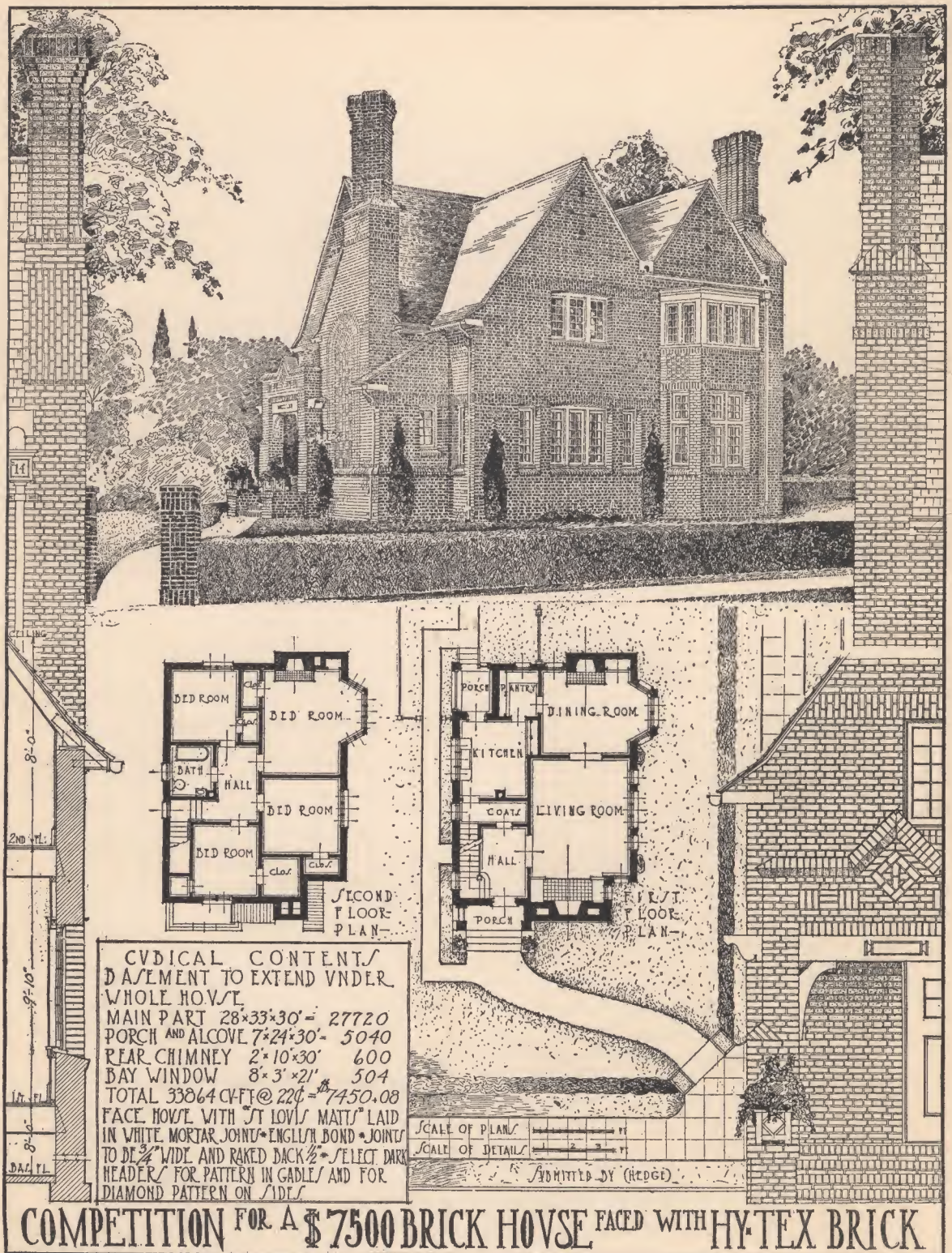
TOTAL CUBIC FT. = 34090
 COST 34090 CU. FT. x 22¢ = \$7499.80



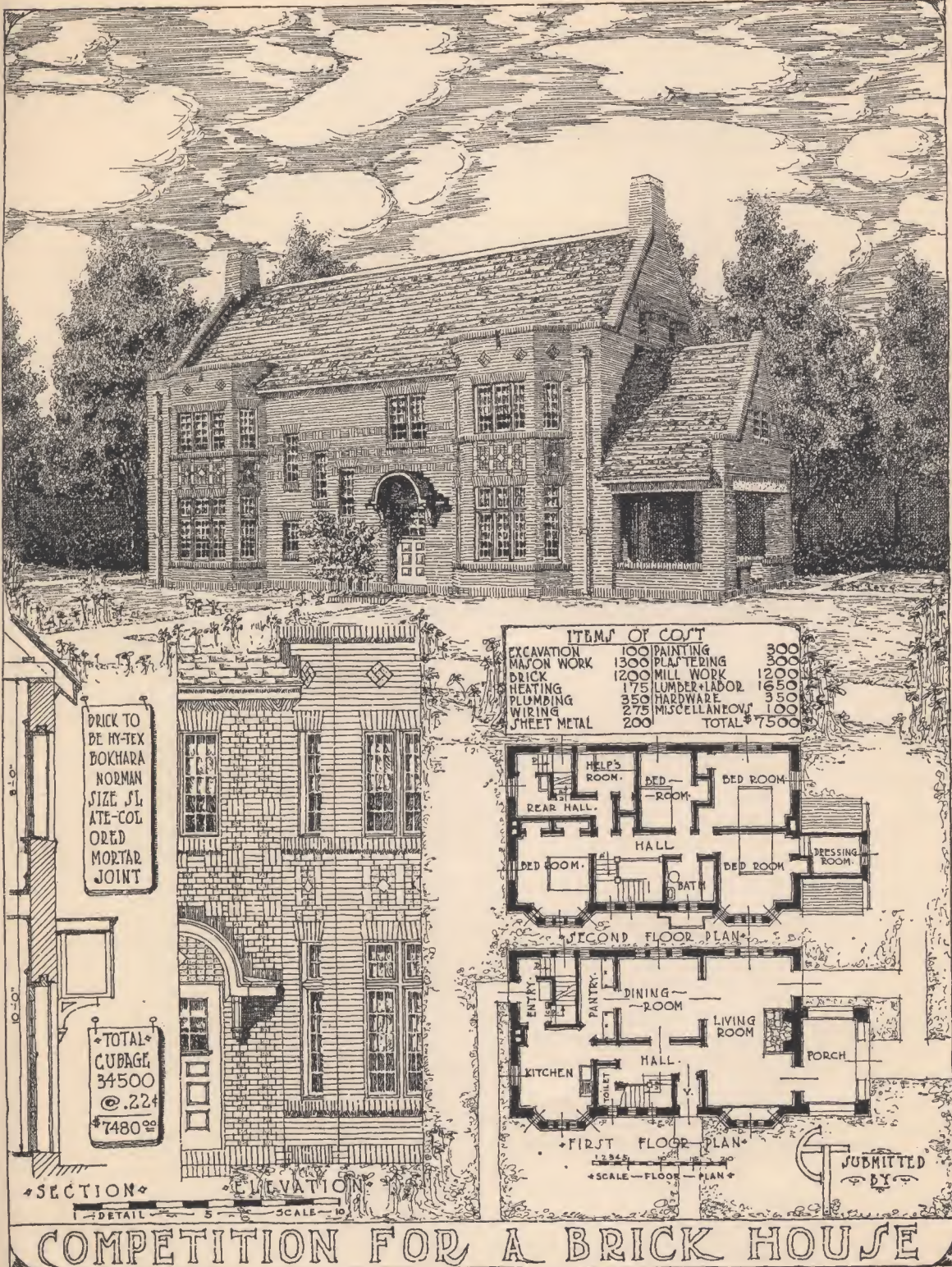
COMPETITION FOR A BRICK HOUSE TO COST
 SEVEN THOUSAND FIVE HUNDRED DOLLARS

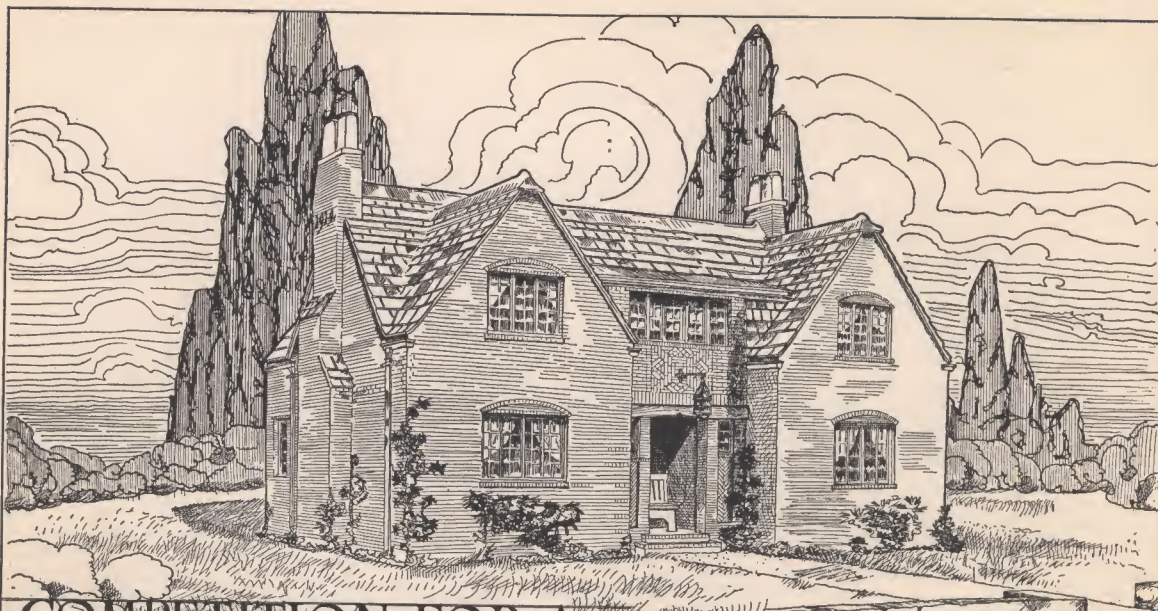
DESIGN BY EDMUND F. WINDSOR
 1155 Dean Street, Brooklyn, N. Y.

The Hy-tex House



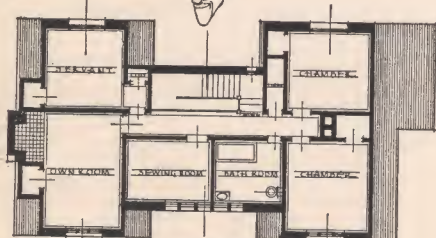
DESIGN BY HERMAN A. MOLDENHOUR
 1319 Alaska Building, Seattle, Wash.



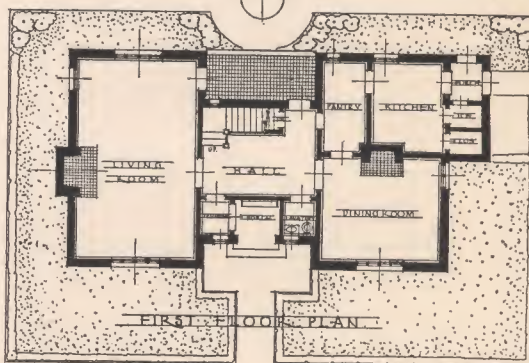


COMPETITION FOR A HY-TEX BRICK HOUSE

SUBMITTED BY

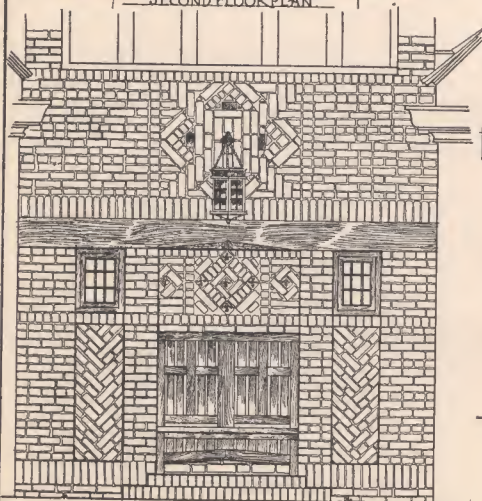


SECOND FLOOR PLAN

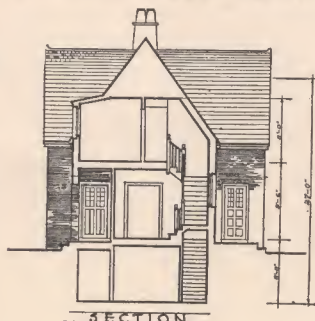


FIRST FLOOR PLAN

SCALES



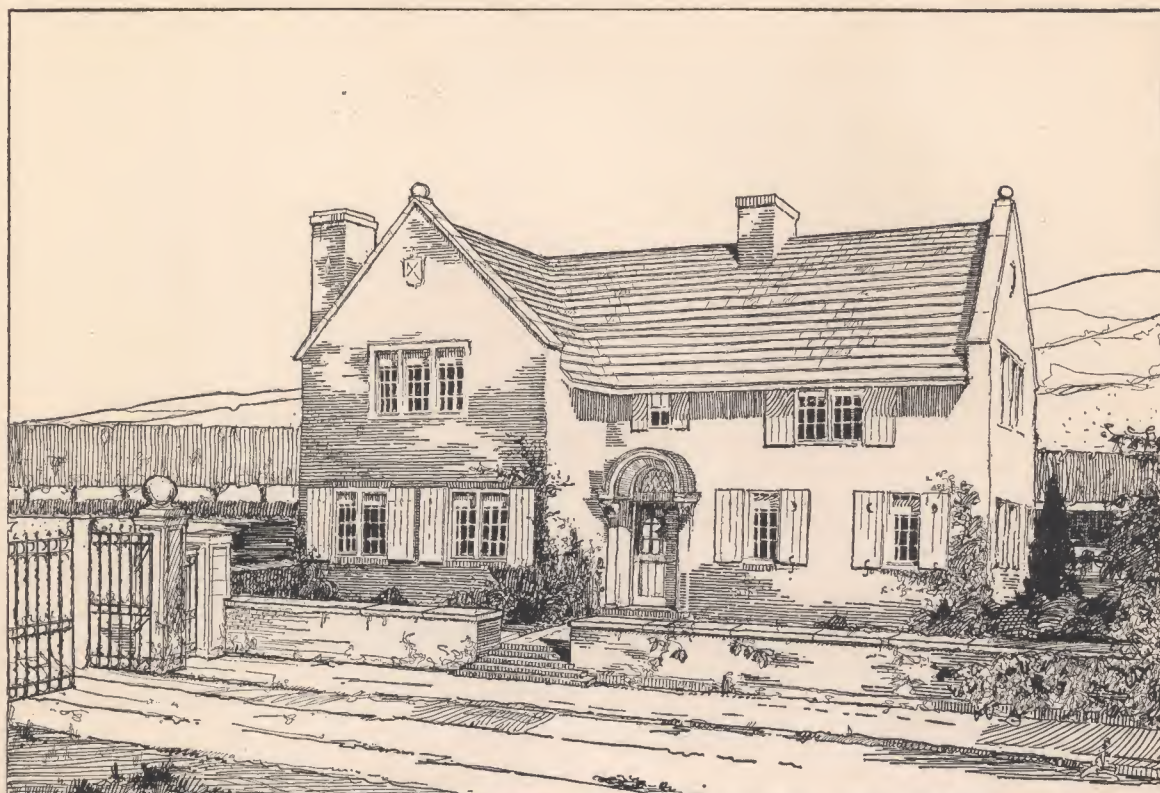
DETAIL OF ENTRANCE



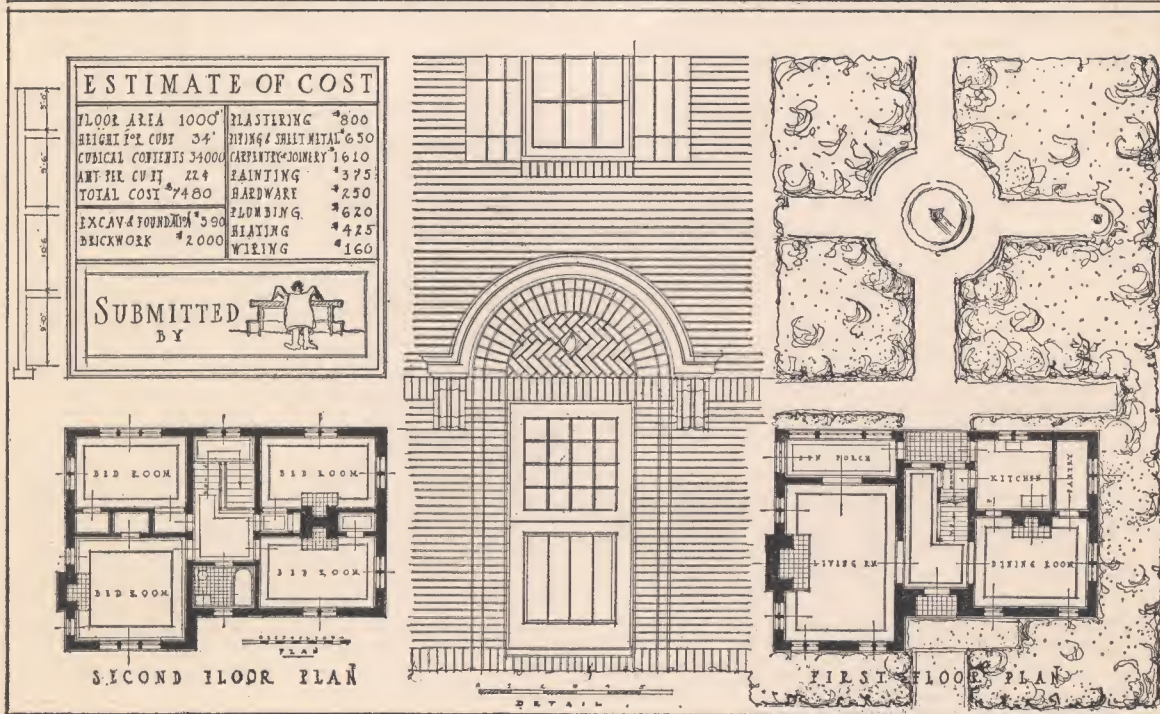
SECTION

SCHEDULE OF COSTS ETC.	
LIVING ROOM 12x27=459	5QFT
DINING ROOM	
KITCHEN & PANTRY 7x27=459	- -
HALL	13x18=234 - -
REAR PORCH	
ICE BOX ETC. 5x13=	65 - -
CHIMNEY 2x6	12 - -
TOTAL AREA	1229 - -
AT AVERAGE HEIGHT OF 27 FT.	
EQUAL 533,183 CUBIC FEET	
AT 22¢ PER CU FT.=	\$7300.26
RED BRICK OF VARIOUS SHADES TO	
BE Laid DOUBLE STRETCHER BOND	
WITH HALF INCH JOINTS	

DESIGN BY HENRY BOAK
456 East 183d Street, New York, N. Y.

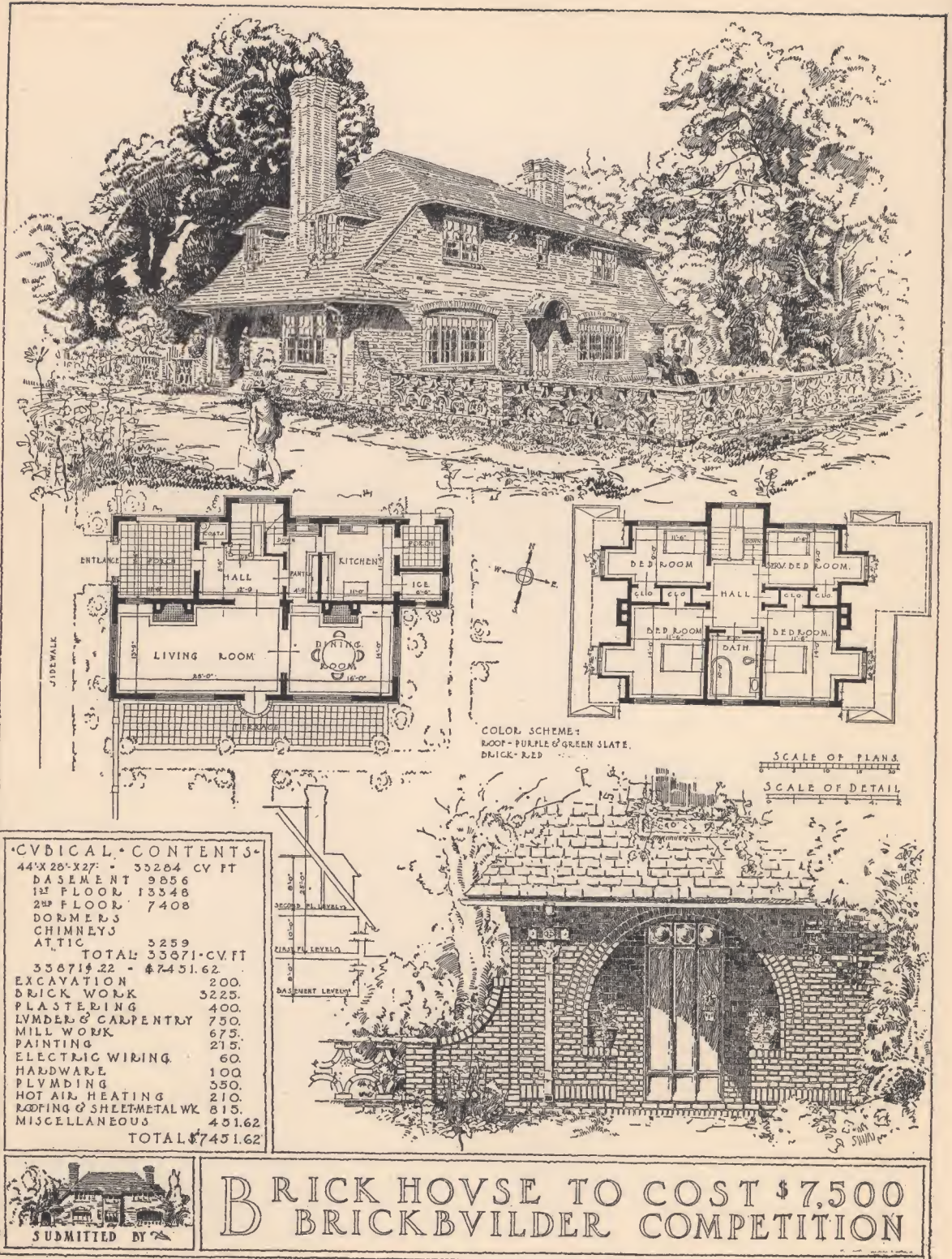


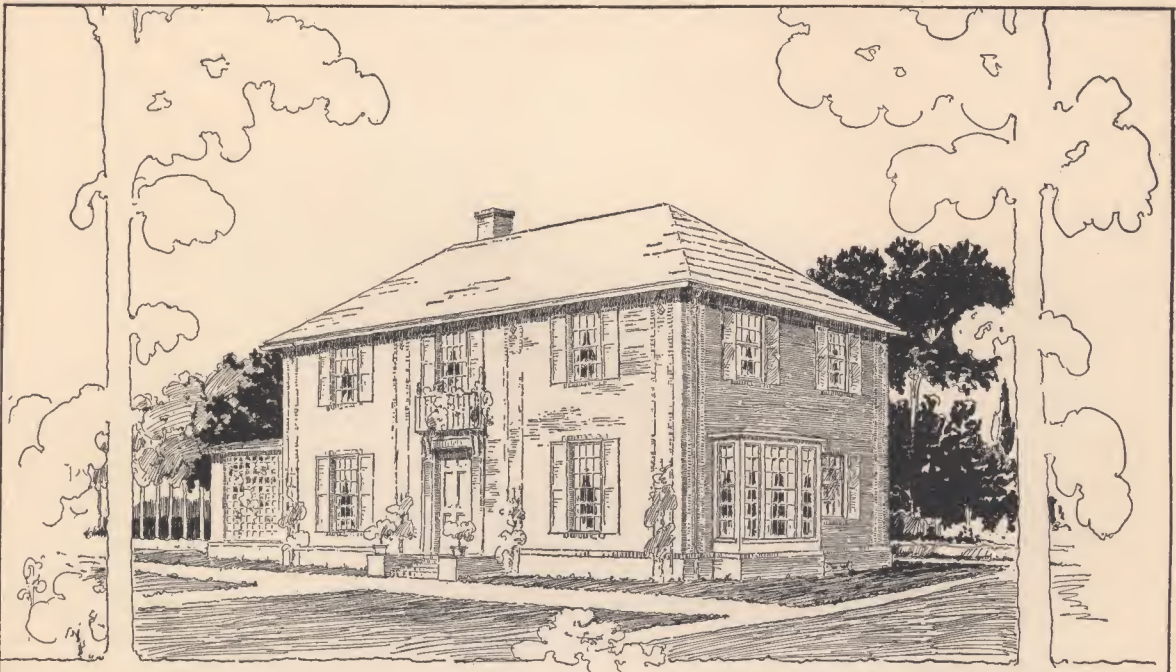
COMPETITION FOR A \$750000 BRICK HOUSE • Hy-tex •



DESIGN BY CHARLES G. BEERSMAN
244 Fifth Avenue, New York, N. Y.

The Hy-tex House

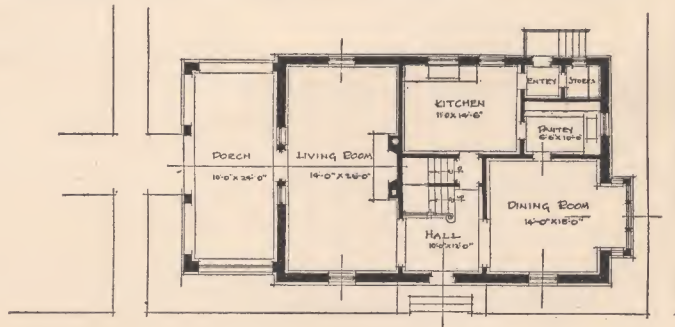
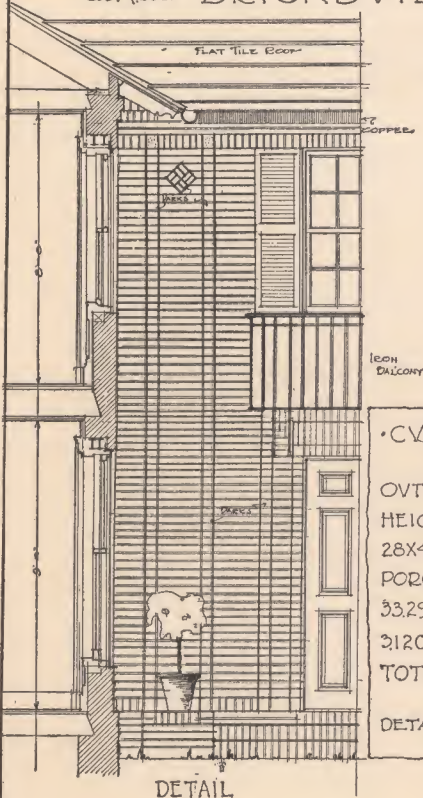




BRICK HOUSE
COST \$7,500.

BRICKBUILDER COMPETITION

SUBMITTED BY
JAX

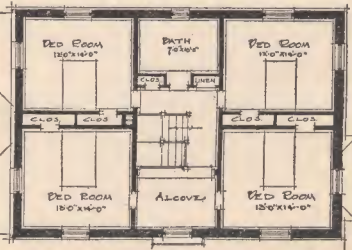


FIRST FLOOR PLAN

• CYBICAL CONTENTS • • OF HOUSE •

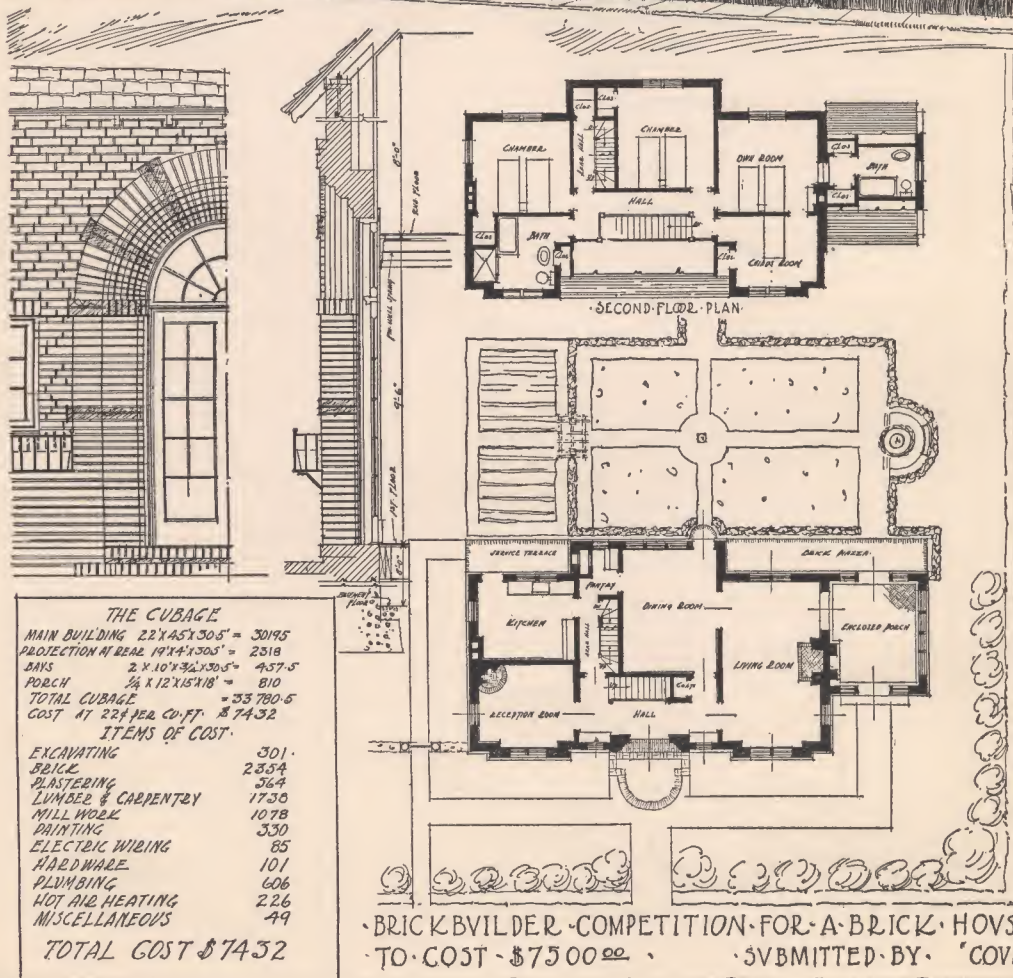
OUTSIDE 28'0" X 41'0"
HEIGHT 29'0"
 $28 \times 41 \times 29 = 33,292$
 $33,292 \times 22\frac{1}{2} = 7324.24$
 $3120 \times 5\frac{1}{2} = 171.60$
TOTAL \$7,495.84

SCALE
DETAIL 1" = 16' PLAN 1" = 16'



SECOND FLOOR PLAN

The Hy-tex House



DESIGN BY E. D. STONEROD
 R. F. D. No. 4, Bellevue Br., Pittsburg, Pa.



PERSPECTIVE

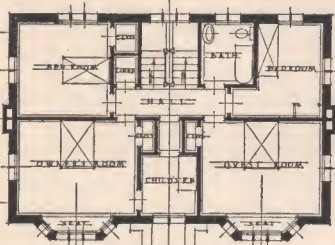
SCALE 1" = 10'

THE
BRICKVILDER
COMPETITION
FOR
A \$7500
BRICK HOUSE

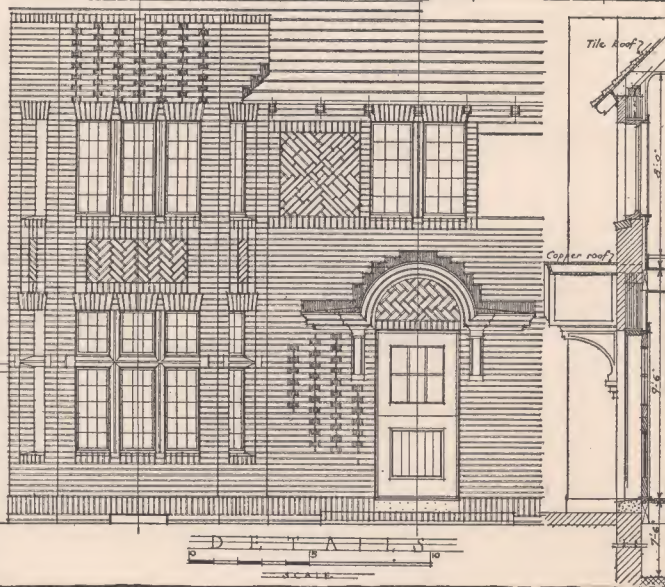
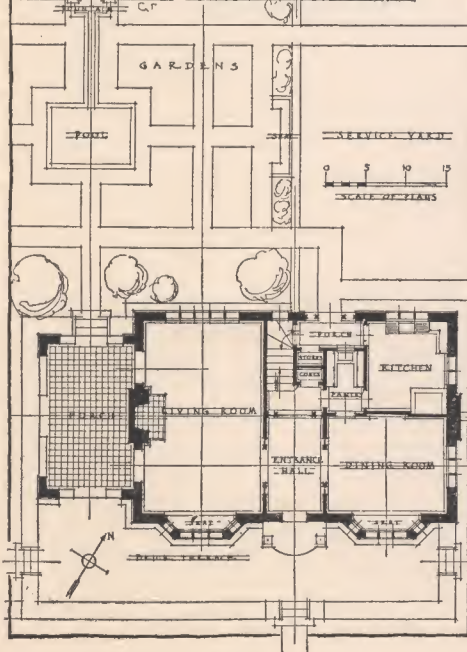
SUBMITTED BY
A. T. VEBY

~ COST DATA ~

CUBAGE	ITEMS
MAIN PART OF HOUSE	EXCAVATING 150
IS TWENTY SIX BY	MASONRY 2850
FORTY BY THIRTY ONE	CARPENTRY 2275
HIGH, EQUALS 32240	PLASTERING 400
CUBIC FEET.	TILING 120
DAYS ARE TWO BY	ELECT. WIRING 100
NINE BY TWENTY SIX	PAINTING 215
FEET HIGH, EQUALS	GLAZING
936 CUBIC FEET.	PLUMBING 465
PORCH IS TWELVE BY	HEATING 900
TWENTY BY FORTY FIVE	HARDWARE 150
FEET HIGH, EQUALS	MISCELLANEOUS 275
8260 EQUALS 840	TOTAL \$7500
CUBIC FEET.	
TOTAL 3406 CUBIC	
FEET 270 = \$7483.52	

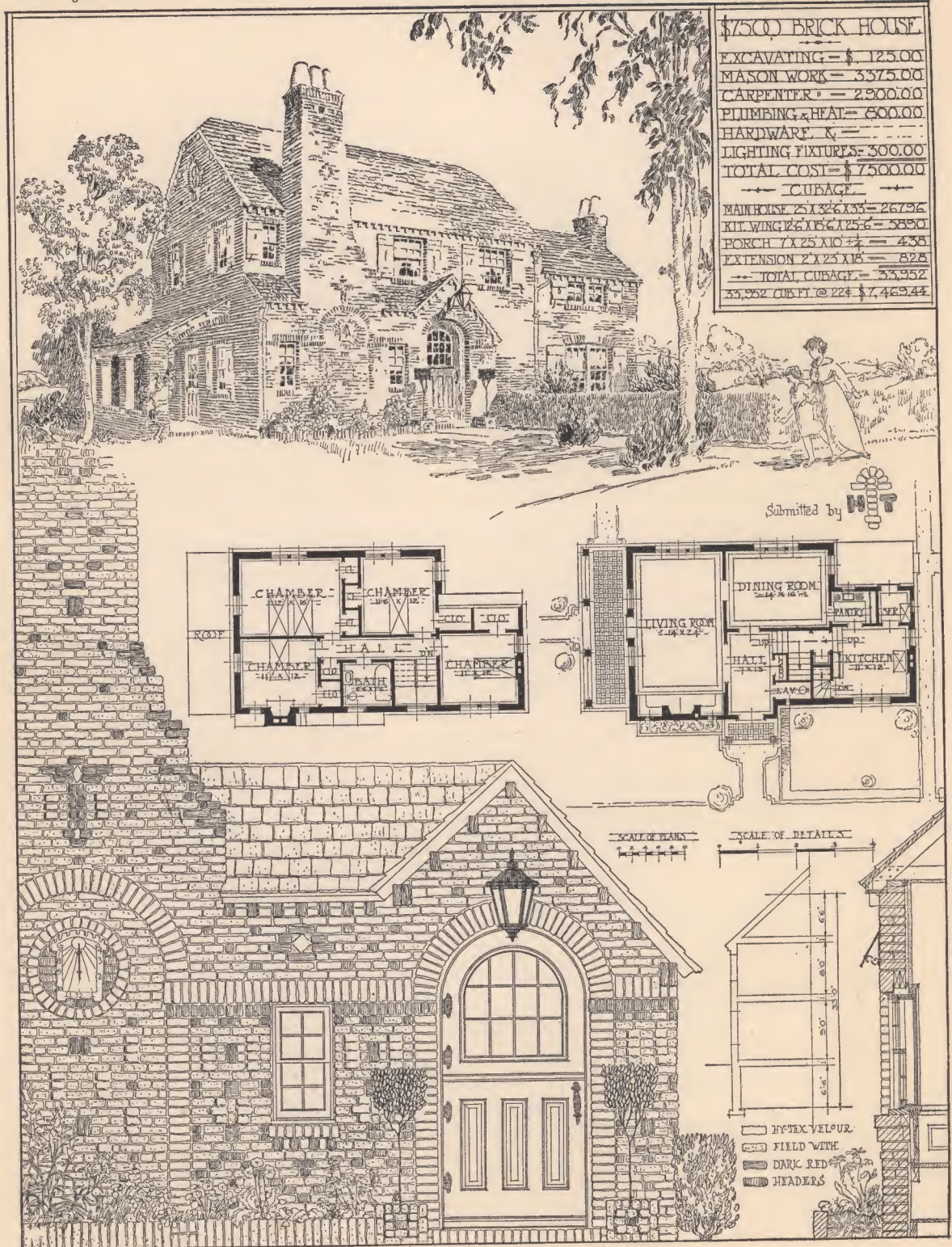


SECOND FLOOR PLAN

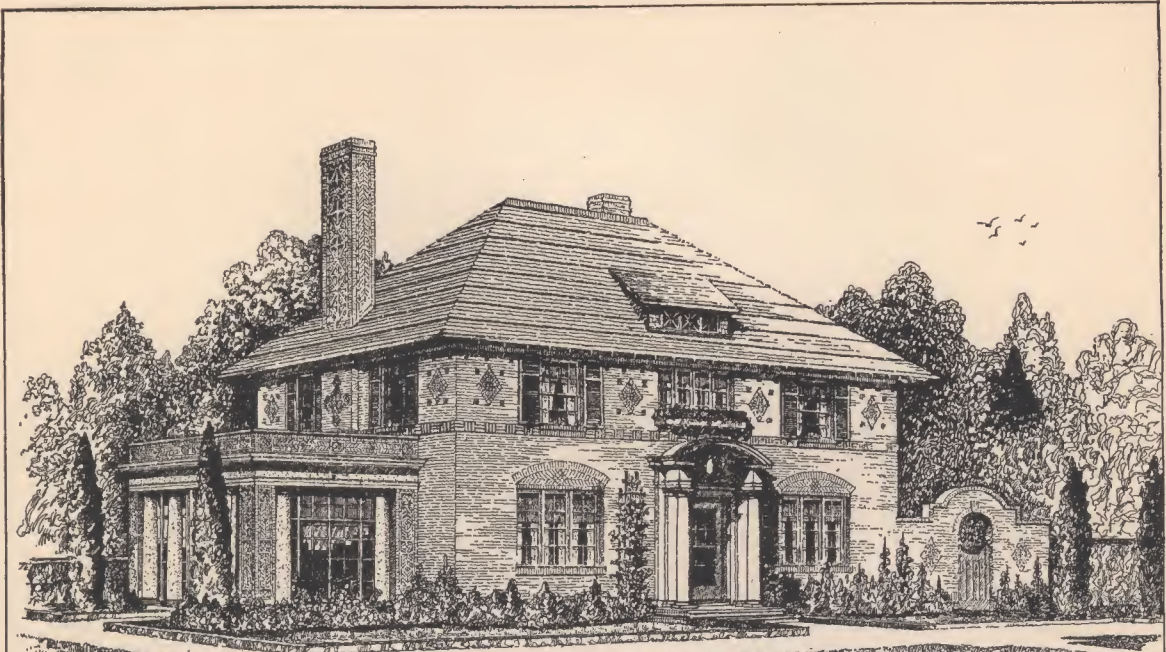


DETAILS
SCALE 1" = 10'

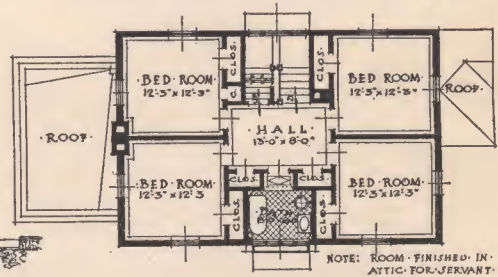
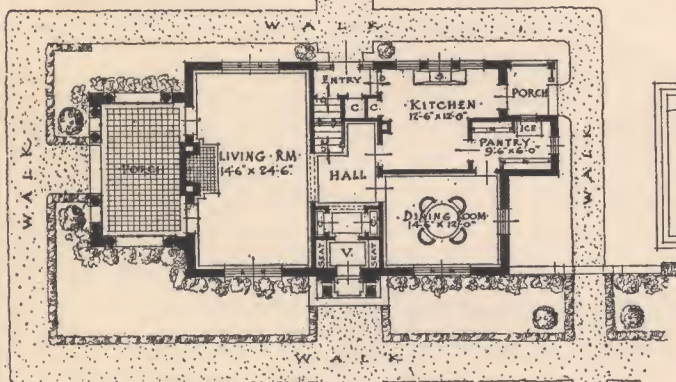
The Hy-tex House



DESIGN BY RICHARD S. PALLESEN
345 Fifth Avenue, New York, N. Y.



BRICK HOUSE COMPETITION
FACED WITH HY-TEX BRICK
COST NOT TO EXCEED \$7,500



NOTE: ROOM FINISHED IN ATTIC FOR SERVANT.

SECOND FLOOR PLAN

SUBMITTED BY



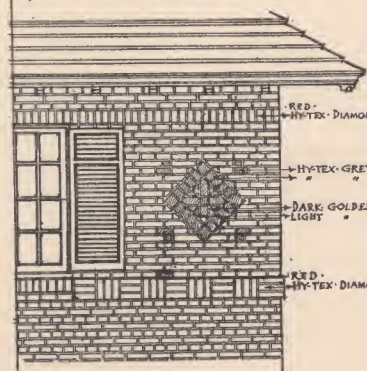
PLANS 1 2 3 4 5
SECTION 1 2 3 4 5
DETAILS 1 2 3

CUBAGE

MAIN PORTION 40'x26'-6"x31' ≈ 32860
SIDE PORCH+PANTRY 14'x6'x12' ≈ 252
ENCLOSED PORCH 19'x12'x12' ≈ 684
FRONT ENTRANCE 8'x3'x12' ≈ 72
COST \$7450.96 ≈ \$0.22 x 33868

ITEMS WITH COSTS

EXCAVATING	125
HY-TEX BRICK	1000
MAJON WORK	1650
PLASTERING	600
CARPENTRY	2500
PLUMBING	400
HEATING	375
PAINTING	500
ELECTRIC WIRING	125
HARDWARE	125
MISCELLANEOUS	300
	\$7500

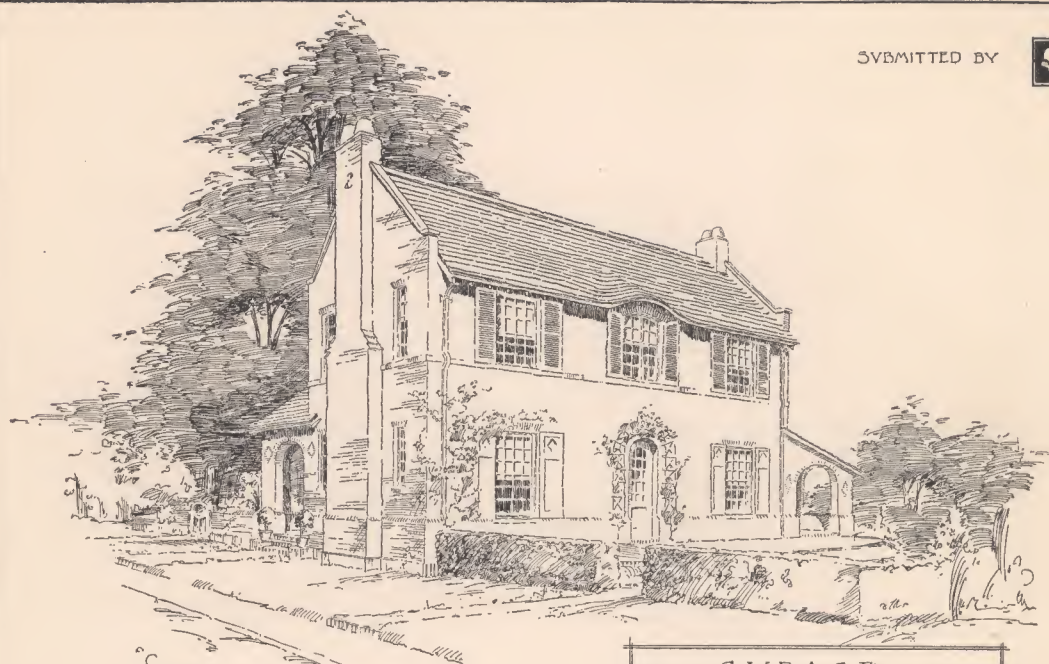


LEGEND

BODY OF HOUSE FACED WITH RED ST. LOUIS MATT & WATERTABLE HY-TEX DIAMOND MATT STRETCHERS LAID VERTICAL & FLUSH > BELT COURSE HY-TEX DIAMOND MATT DIAMOND PATTERNS IN FRIEZE BORDER OF HY-TEX GREY MATT CENTER DESIGN OF GOLDEN MOTTLED MATTS BOTH DARK & LIGHT > FROM WATERTABLE TO BELT COURSE BRICK LAID WITH DUTCH CROSS BOND ABOVE BELT COURSE IN ENGLISH BOND PORCH PIERS & CHIMNEYS ABOVE ROOF IN ST. LOUIS BOKHARA MEDIUM RANGE & VENETIAN RED & ALL BRICKWORK 1/2 FLUSH WHITE JOINT

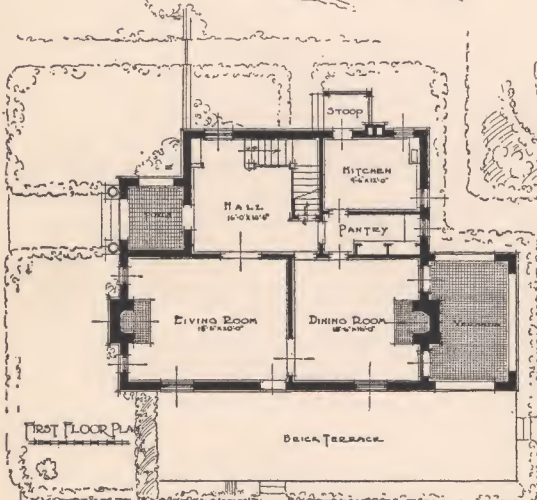
The Hy-tex House

SUBMITTED BY



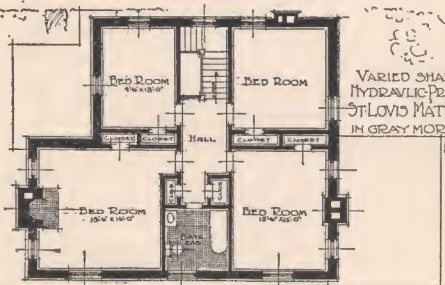
• CVBAGE •

BASEMENT 15 X 30 X 7 = 3150 CV.FT.
 MAIN PART 17 X 38 X 26 = 16796 " "
 HALL-KITCHEN-ETC 15 X 30 X 26 = 11700 " "
 ENTRANCE PORCH 8 X 8 X 12 ÷ 4 = 216 " "
 VERANDA 11 X 17 X 12 ÷ 4 = 561 " "
 KITCHEN ENTRY 5 X 6 X 10 ÷ 4 = 75 " "
 2 CHIMNEYS 4 X 1 X 30 = 240 " "
 TOTAL CV.FT. 32738 " "
 COST PER CV.FT. 22 CTS.
 TOTAL COST \$7202.36



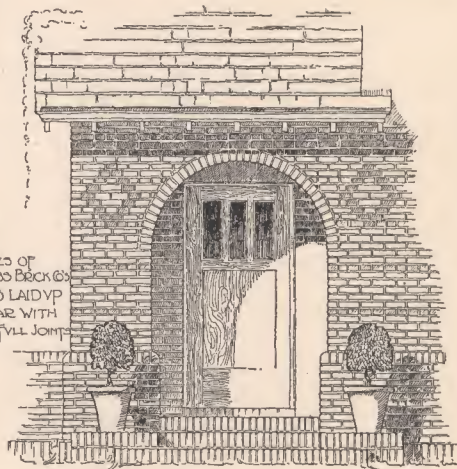
FIRST FLOOR PLAN

BRICK TERRACE



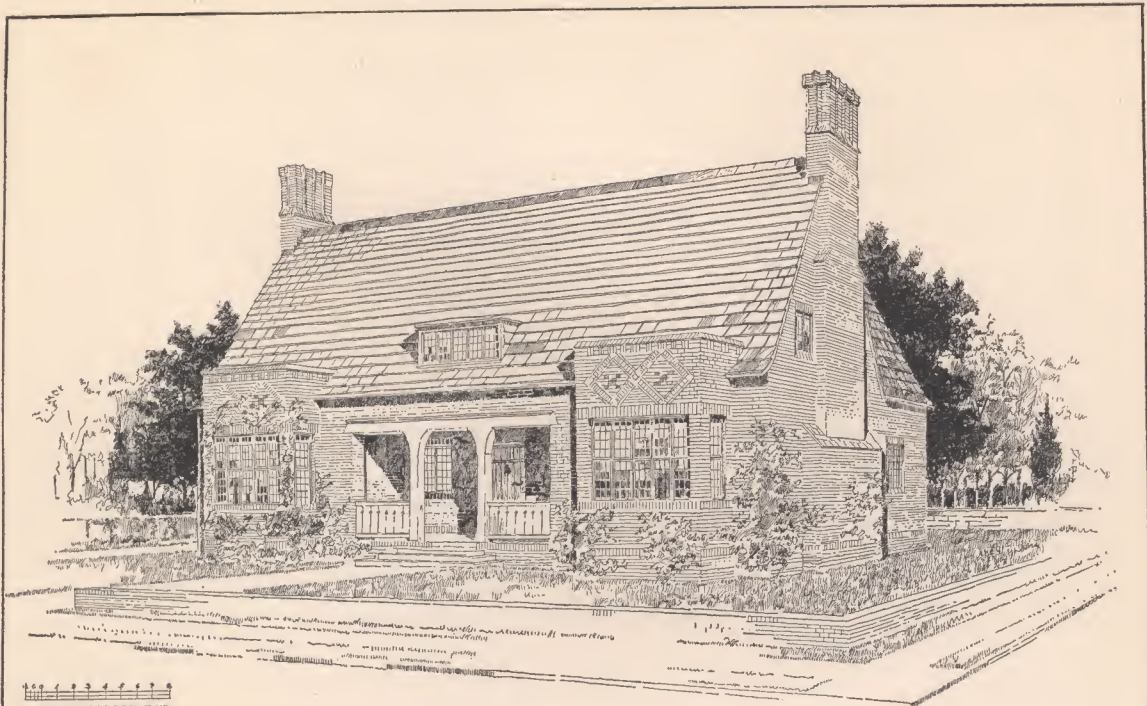
SECOND FLOOR PLAN

VARIED SHADES OF
 HYDRAULIC PRESS BRICKS
 ST. LOUIS MORTAR LAID UP
 IN GRAY MORTAR WITH
 FULL JOINT

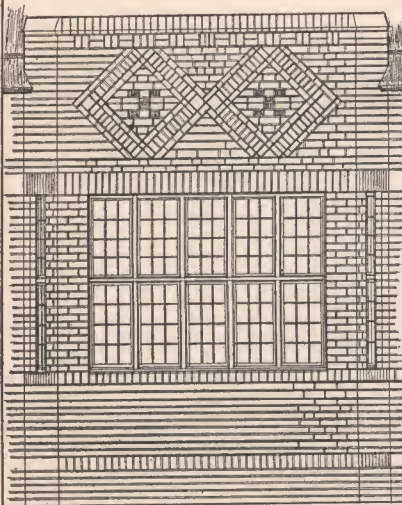


BRICKBUILDER COMPETITION - A. \$7500.00 BRICK HOUSE

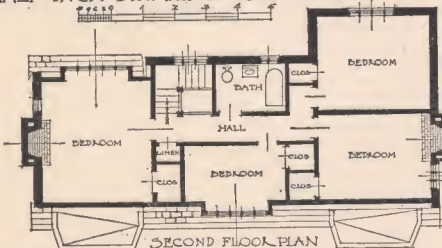
DESIGN BY JAMES L. GATLING
 504 Southern Trust Building, Little Rock, Ark.



SCALE OF PERSPECTIVE



HALF INCH DETAIL OF BAY WINDOW



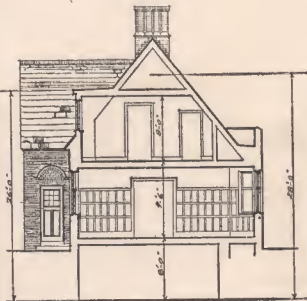
SECOND FLOOR PLAN

SCHEDULE CUBAGE & MATERIALS

LIVING ROOM WING - 15x21x28'	= 8820
CENTRAL HALL ETC - 21x21x28'	= 12348
DINING ROOM WING - 13x14x28'	= 5880
KITCHEN WING - 16x13x26'	= 5408
BAY WINDOWS - 2x3x10x19'	= 1197
CHIMNEYS - 2x5x2x35'	= 420
TOTAL CUBAGE	= 34,073

TOTAL COST OF HOUSE
34,073 CUBIC FEET @ 22¢ = \$7,496.06

BRICKWORK TO BE HY-TEX IN TWO COLOURS - DARK RED STRETCHERS WITH HEADERS VARYING TO A PURPLE TEXTURE TO BE HY-TEX NO 17 - FLEMISH DOUBLE STRETCHER BOND HALF INCH JOINT 3/4 WITH EVERY FOURTH ROW HEADERS & ROOF TO BE GRADUATED SLATE WITH 2" MALLETTED COPPER RIDGE - WINDOWS TO BE CASEMENTS WITH LEADED GLASS &

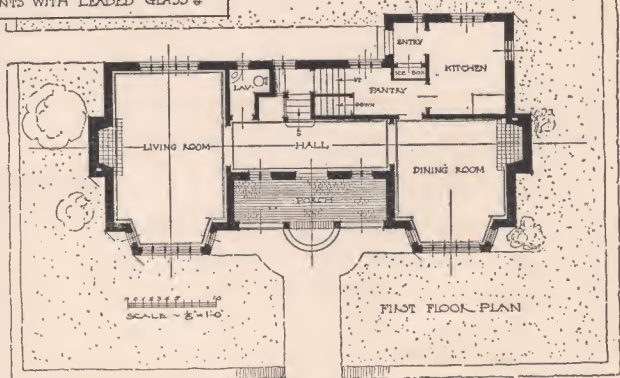


SUBMITTED BY



SECTION

SCALE 1/4" = 1'-0"



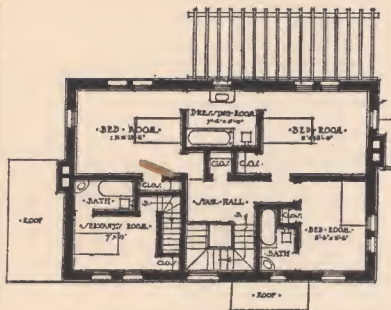
FIRST FLOOR PLAN

SCALE 1/8" = 1'-0"

BRICKBUILDER COMPETITION FOR A \$ 7500 BRICK HOUSE

COMPETITION FOR A BRICK HOUSE TO COST SEVENTY-FIVE HUNDRED DOLLARS

ADMITTED BY :

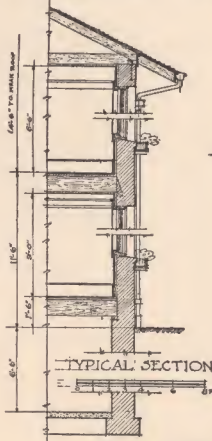


SECOND FLOOR PLAN
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 FT.

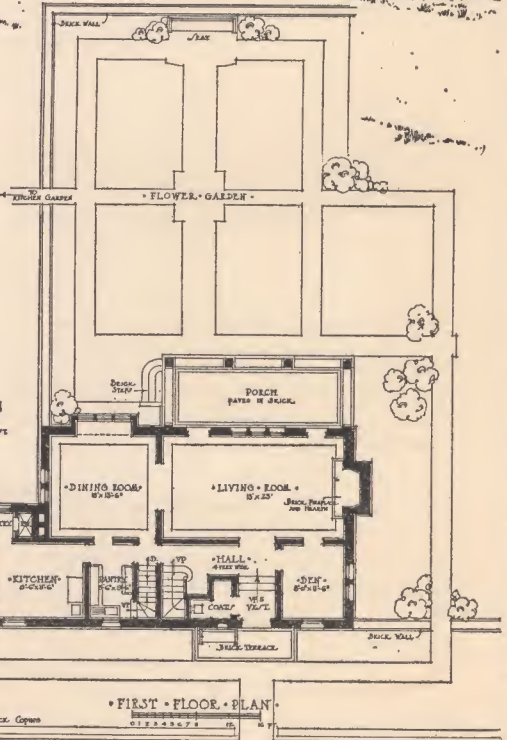


DETAIL OF ENTRANCE

PERSPECTIVE



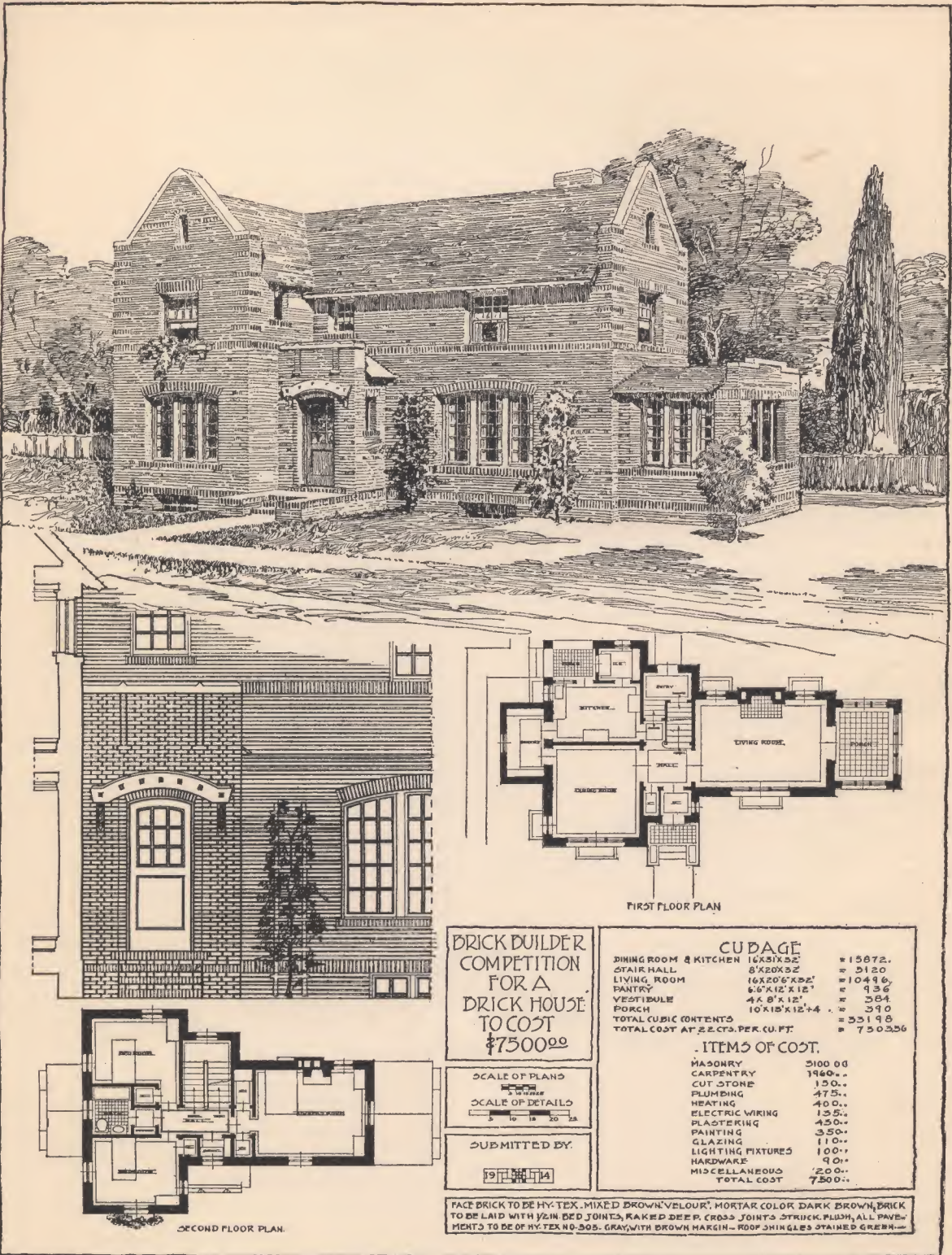
TYPICAL SECTION



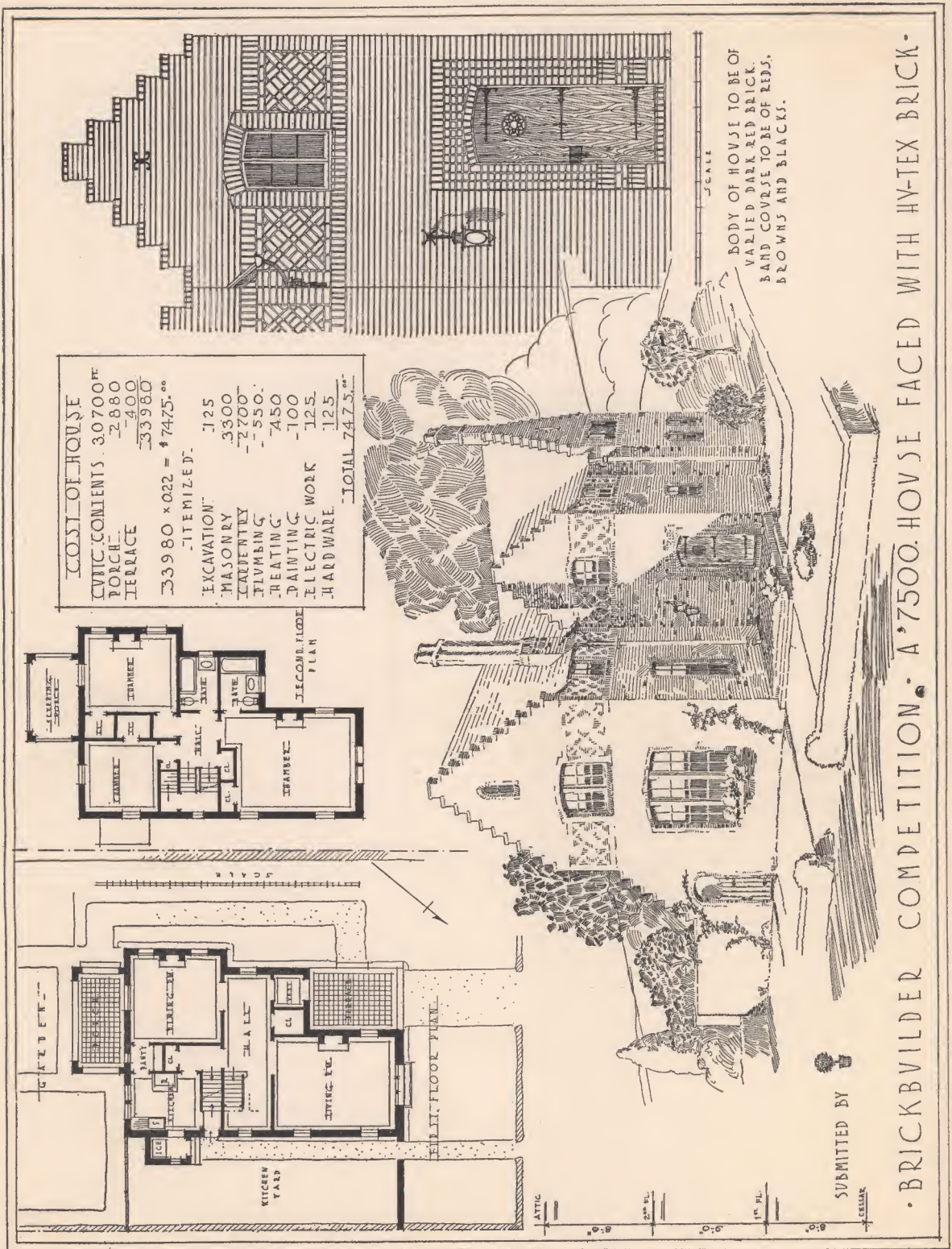
FIRST FLOOR PLAN
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 FT.

CUBAGE OF HOUSE		CYB. FT.
BASEMENT TO GRADE	975 SQ. FT. X 6 1/2' EQ.	6338
GRADE TO 2ND FLOOR LEVEL	1060 SQ. FT. X 11 1/2' EQ.	12320
2ND FLOOR LEVEL TO MEAN ROOF	975 X 14 1/2' EQ.	14158
PORCHES		625
DINING ROOM DAY		120
CHIMNEYS		400
TOTAL CUBAGE :		33941
COST FIGURED AT 22 CENTS PER CYBIC FOOT		
33941 X 22 = \$		746702
ITEMIZED COST OF BUILDING		
EXCAVATING	\$	25000
BRICKWORK INCLUDING FOOTINGS		270000
CARPENTRY		200000
PLUMBING		65000
PLASTERING		50000
PAINTING		35000
HEATING		35000
ELECTRIC WIRING AND FIXTURES		40000
HARDWARE		28000
TOTAL COST:		\$746000

DESIGN BY GEORGE RICHARD KLINKHARDT
Apartment 309 El Nido Apartments, Oakland, Cal.

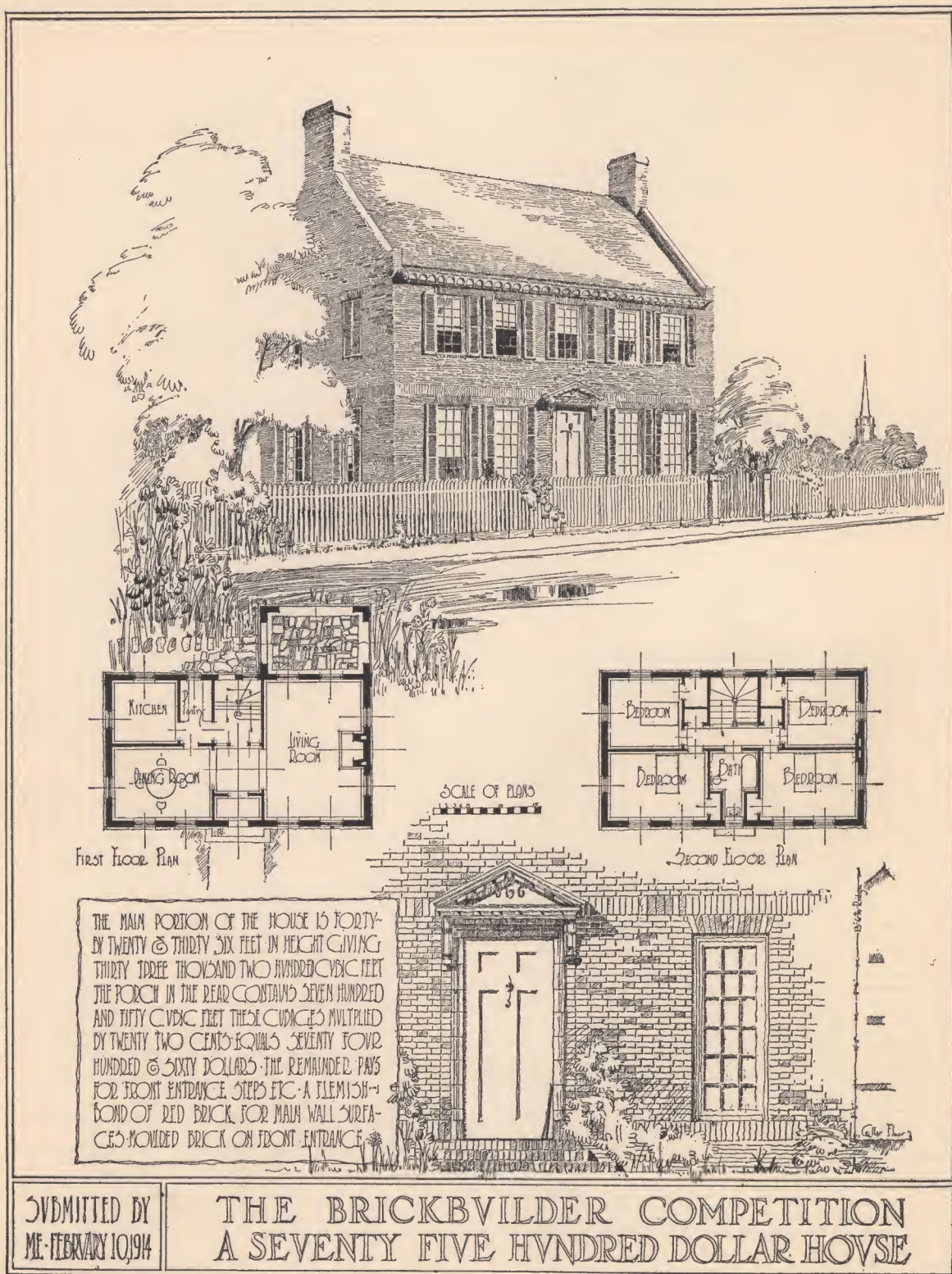


DESIGN BY HUGH BAKER DUNNING
35 South Dearborn Street, Chicago, Ill.



63

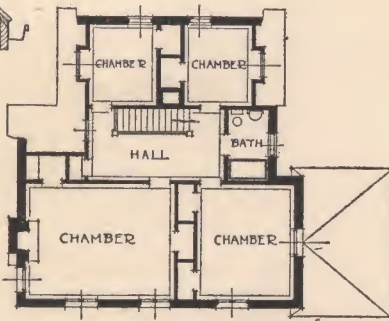
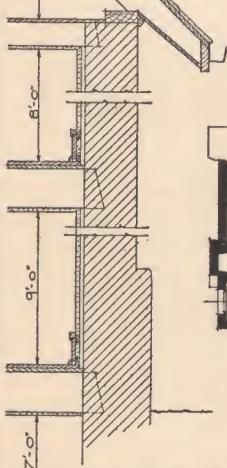
The Hy-tex House



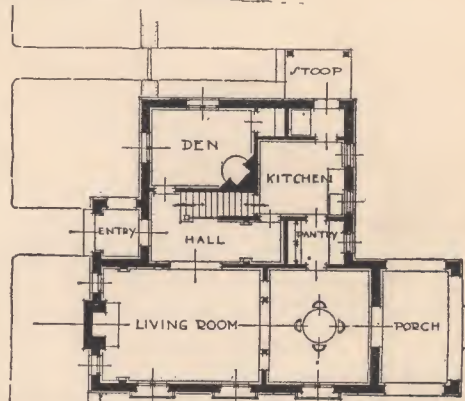
DESIGN BY ALFRED P. SHAW
50 Adams Street, Dorchester, Mass.



SUBMITTED BY



SECOND FLOOR PLAN



FIRST FLOOR PLAN

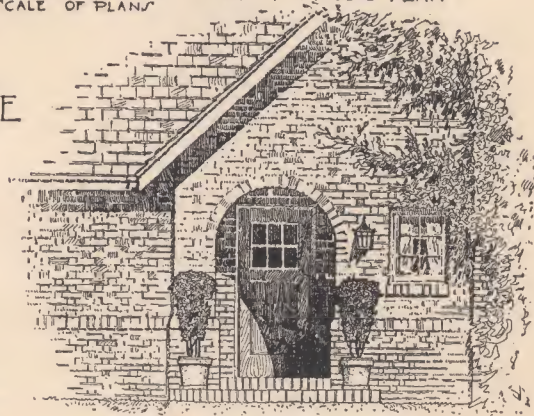
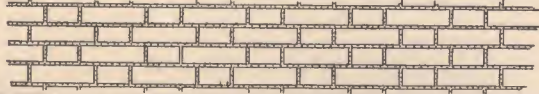
SCALE OF PLANS

COMPETITION FOR A BRICK HOUSE TO COST \$7500

—CUBAGE—

LIVING & DINING ROOMS—16'-6" X 36'-0"=594^{sq}
WING—26'-6" X 20'-0"=530^{sq}
ENTRY—6'-0" X 7'-6"÷4= 13^{sq}
PORCH—10'-0" X 6'-6"÷4= 41^{sq}
TOTAL NO OF SQ. FT.—1178^{sq}
28'-6" X 1178^{sq}= 33573 CU. FT.

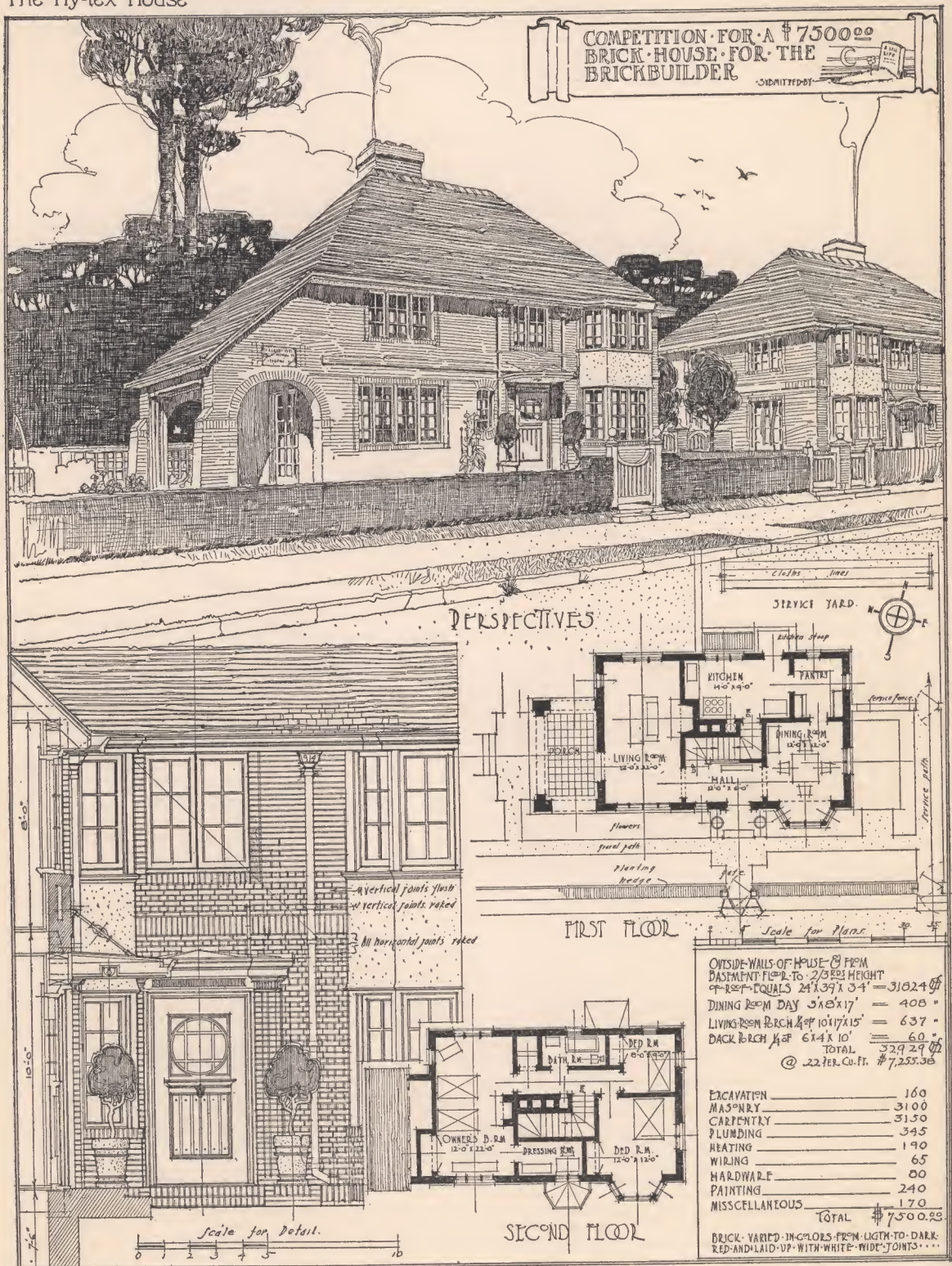
\$0.22
COST—\$7,386.06



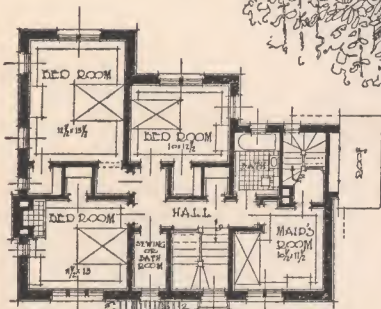
DETAIL OF ENTRANCE

DESIGN BY EUGENE ROBERT SCHULZ
910 Tribune Building, Chicago, Ill.

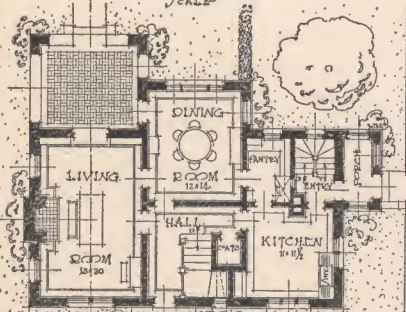
The Hy-tex House



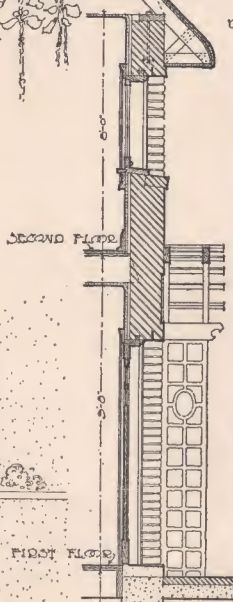
DESIGN BY LOUIS C. ROSENBERG
169 St. Botolph Street, Boston, Mass.



• SECOND FLOOR PLAN •

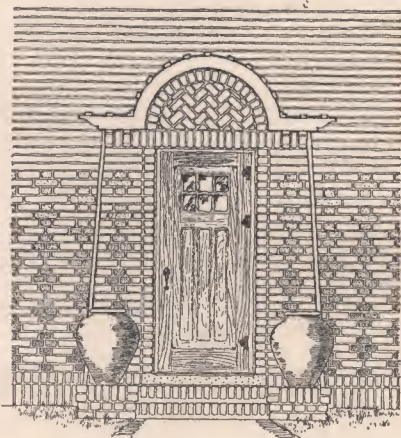


• FIRST FLOOR PLAN •



• SECTION •

NOTES • CVDAGE • ETC •	
• COST • ITEMS •	• CVDAGE •
EXCAVATING \$200	LIV. RM. & PORCH
MASONRY BRICK WK 2700	14' x 22' 30' = 14,020
CARPENTRY & MILLW 2800	DIN. RM. & HALL
PLASTERING 500	13' x 22' 30' = 11,102
PLYMING SHEATING 200	KIT. & BATH
ELEC. WIRING 150	11' x 22' 20' = 7,210
PAINTING & GLAZING 250	SIDE PORCH
HARDWARE 150	5' x 10' 14' = 700
TIN WORK 100	TOTAL AMOUNT
MISCELLANEOUS 200	33,532 CVD. FT.
TOTAL COST \$7500	COST AT 22¢ \$7443.70
• NOTES •	
A HOUSE OF THIS CHARACTER AND COST WOULD HAVE TO DEPEND MORE ON A CHARMING COLOR SCHEME AND AN INTERESTING BOND, RATHER THAN ON CONVENTIONAL DETAILS.	
BLACK TO BE HY-TEX VELOUR, VARIEGATED COLORS: JOINTS A CREAM GRAY. EXTERIOR WOOD TRIM A CREAM WHITE. DOOR STAINED A SOFT GRAYISH GREEN.	



• FRONT ENTRANCE •

AND ITS ALWAYS PAID WEATHER.

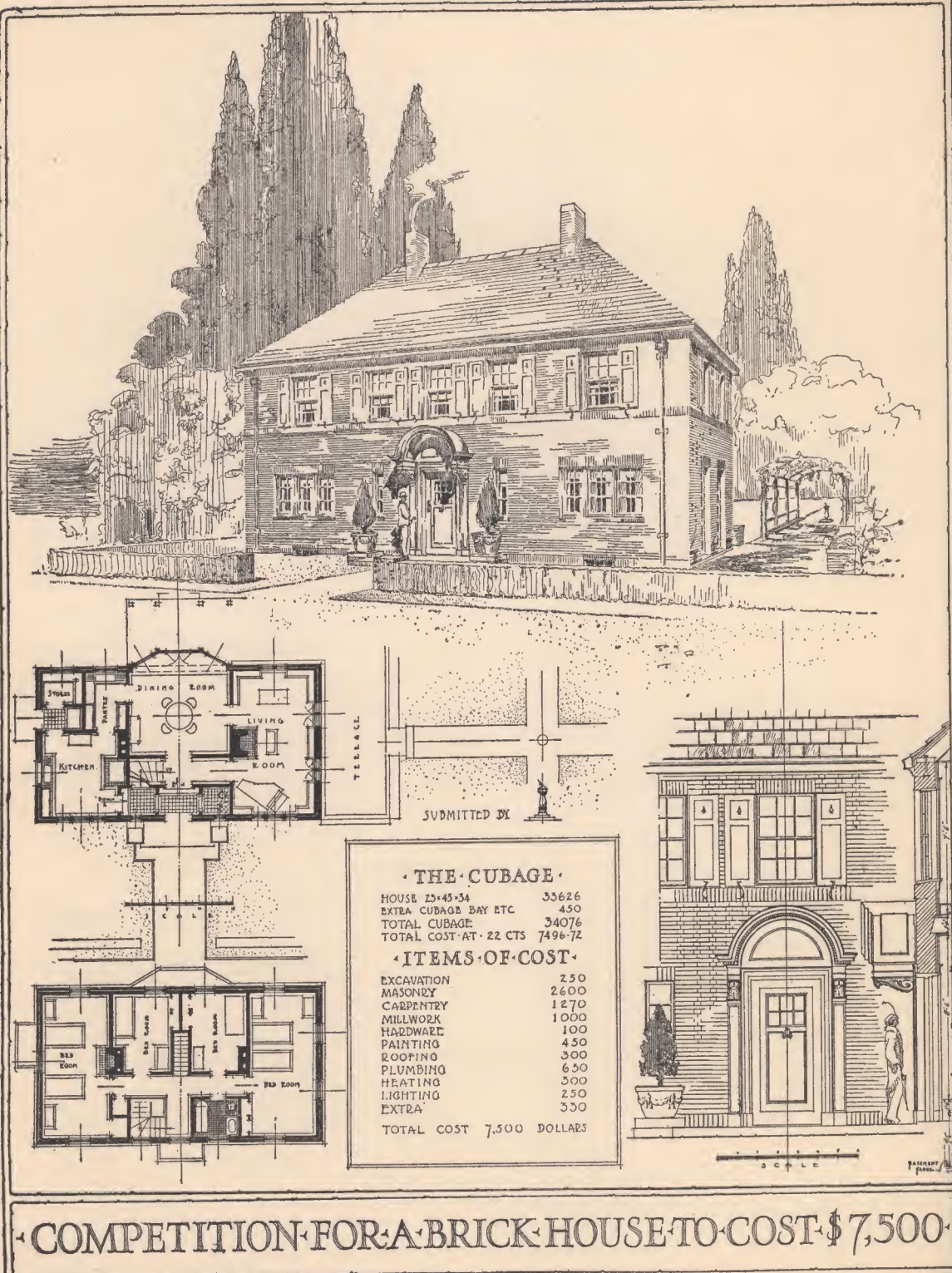


• A • \$7500 • BRICK • HOUSE •

BUILDING HOME THE INCOME



The Hy-tex House

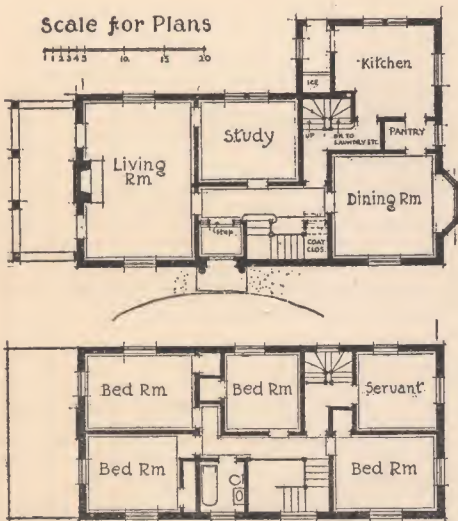


DESIGN BY WALTER GRANT THOMAS AND WILLIAM E. BAKER, JR.
101 Park Avenue, New York, N. Y.



Scale for Plans

1 11 13 14 15 20 30



MAIN PORTION $22 \times 46 \times 30 = 30360$
 KITCHEN ELL $9 \times 18 \times 18 = 2916$
 PORCH $\frac{1}{4}$ OF $8 \times 20 \times 12 = 480$

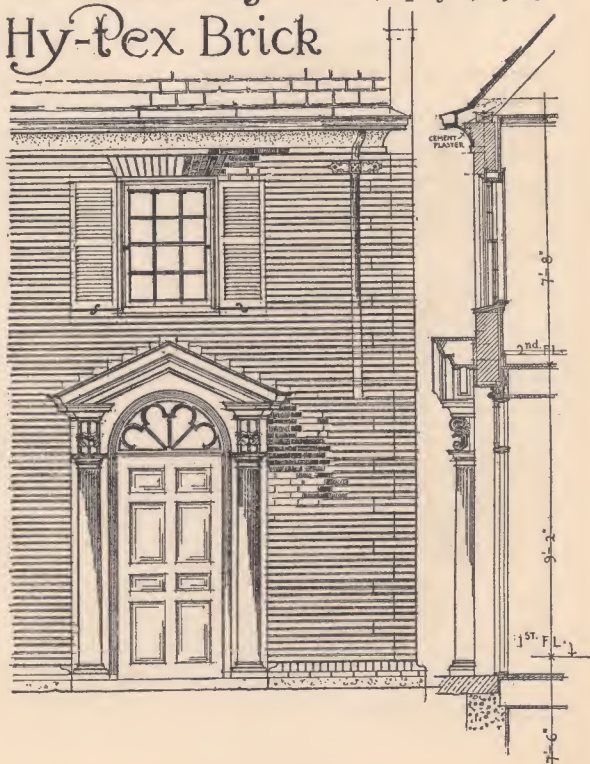
TOTAL CUBE = 33756
 AT 22¢ PER CU-FT =

\$7,426.32

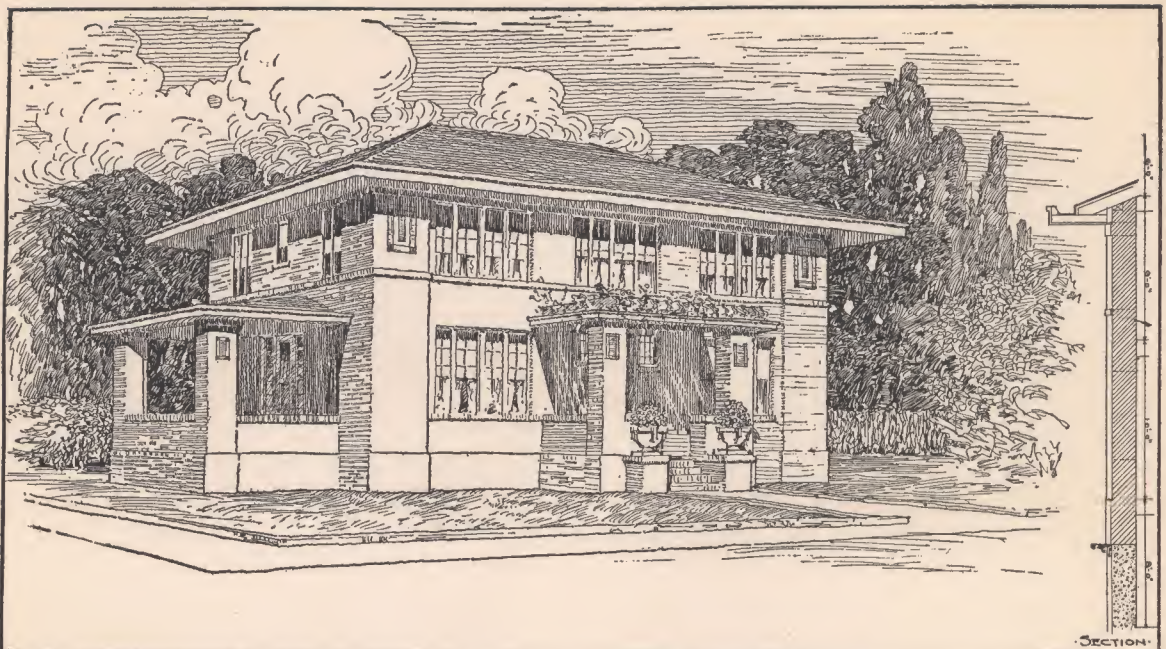
A house of Hy-Pex Brick

Scale for Details

1 2 3 4 5 6

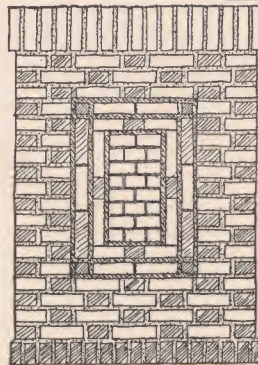


The Hy-tex House

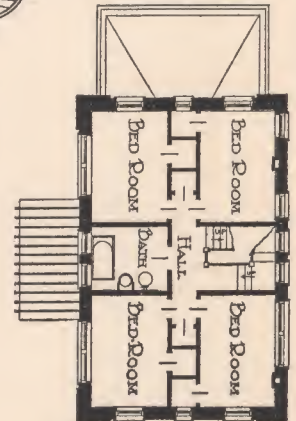


#7500 • HYTEX • BRICK •
HOUSE • COMPETITION • OF •
"THE • BRICKBUILDER"

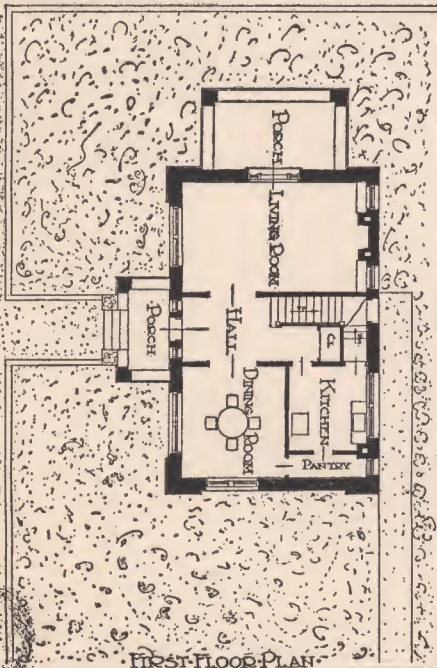
• SUBMITTED BY •



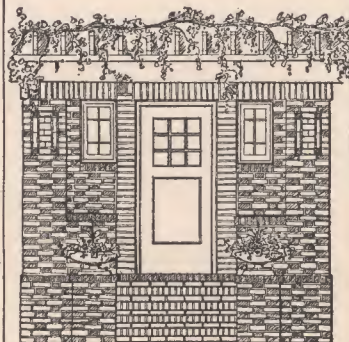
• DETAIL • OF • BRICK •



• SECOND FLOOR PLAN •



• FIRST FLOOR PLAN •



• ELEVATION •

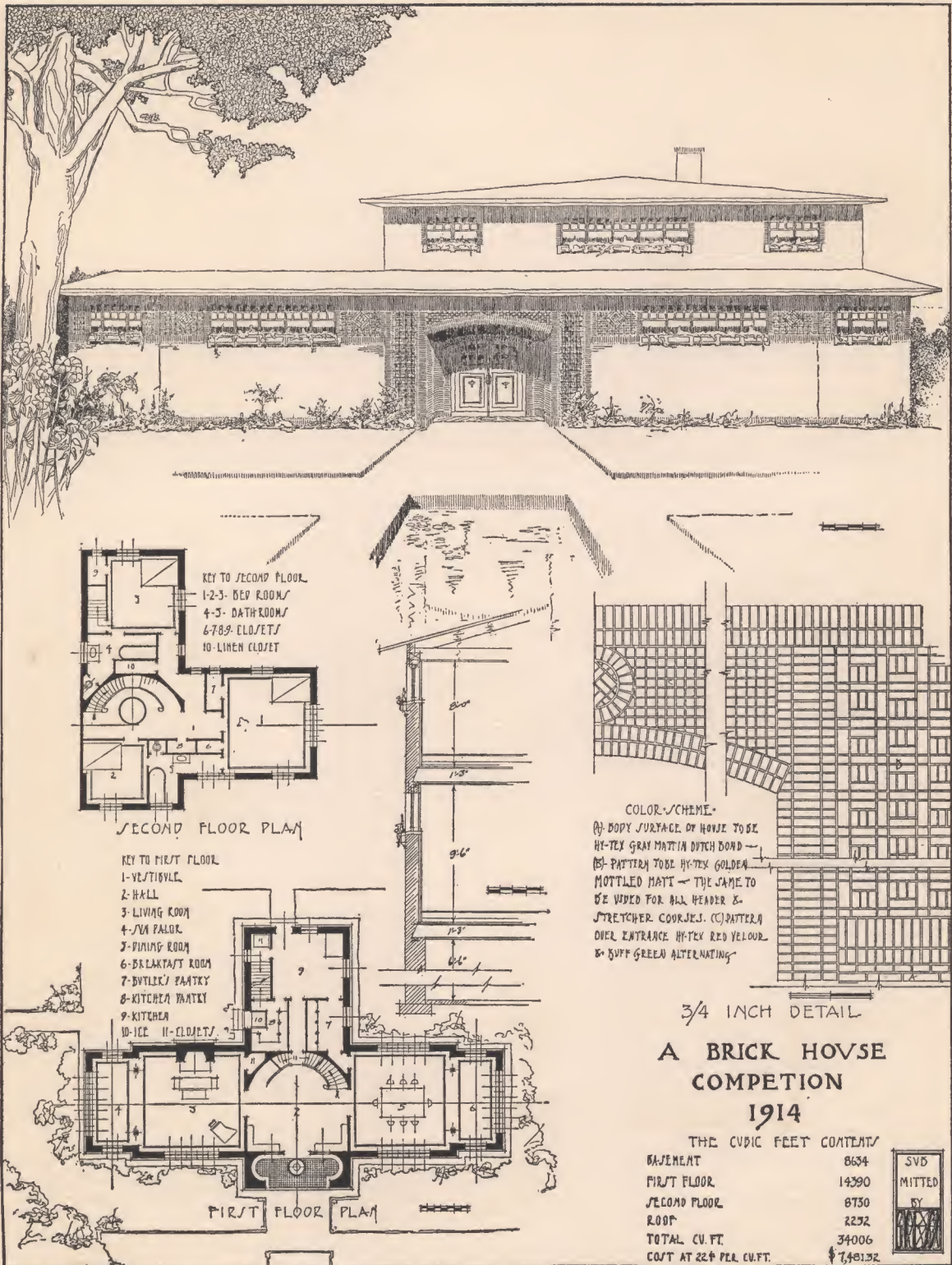
0 5 10 15 20
• SCALE OF FEET •

• CUBIC CONTENTS •

BASEMENT 40x26x8x22 • 1830.40
1ST STORY 40x26x10x22 • 2288.00
2ND STORY 40x26x9x22 • 2059.20
ATTIC 40x26x4x22 • 915.20
PORCH 18x10x18x22 • 178.20
PORCH 18x10x13x22 • 138.60
• TOTAL • \$ 7409.60

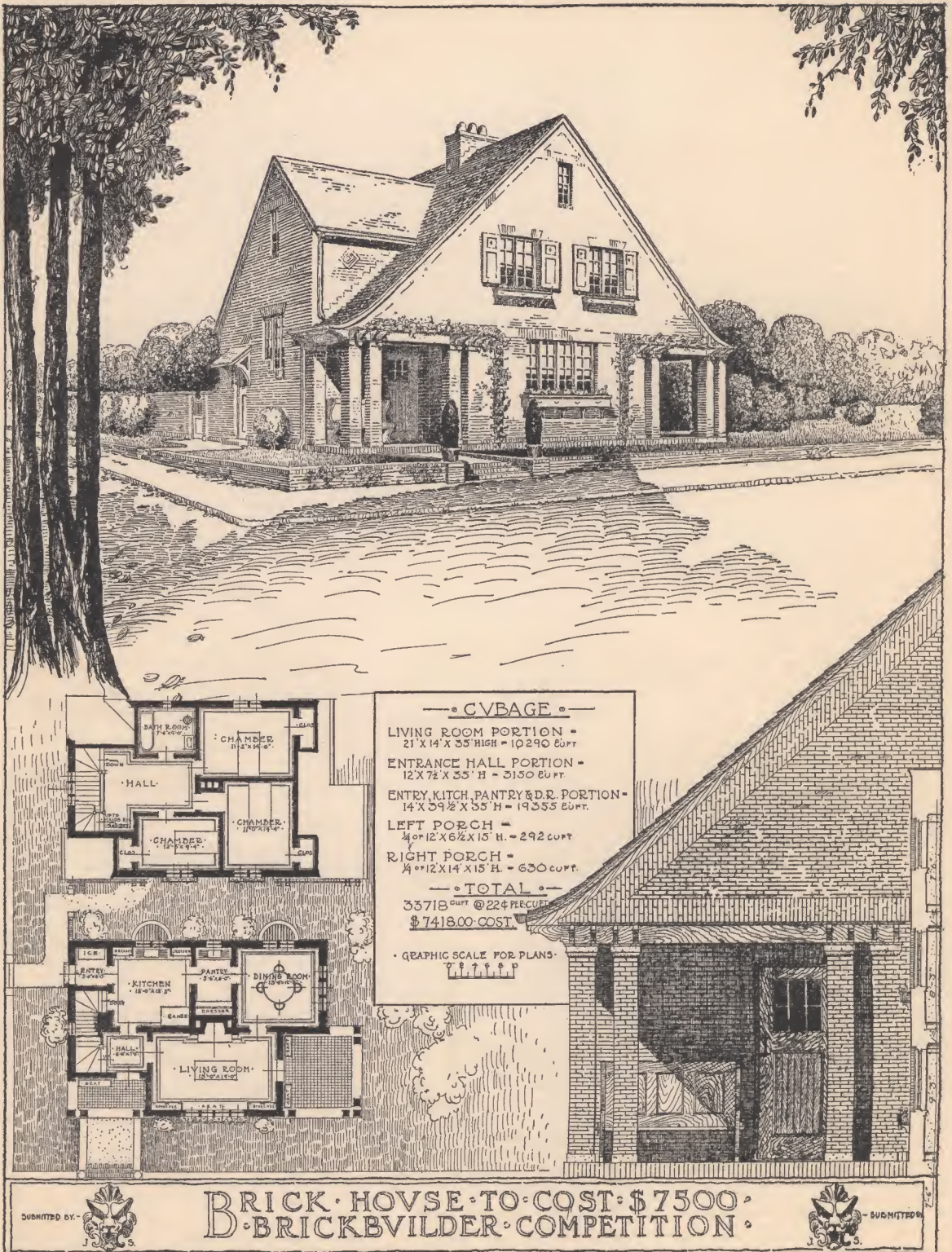
■ = RICH BROWN
■ = DARK STEEL GREY MATTS
DARK BROWN MORTAR JOINT 3/4" WIDE

DESIGN BY JACK TRAVNICEK
720 Tribune Building, Chicago, Ill.

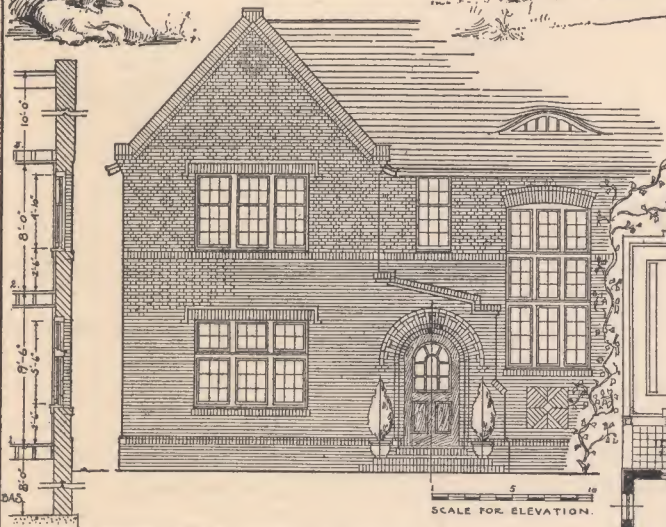


DESIGN BY JACK FRANK
43 West 48th Street, New York, N. Y.

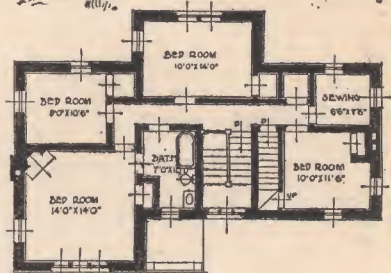
The Hy-tex House



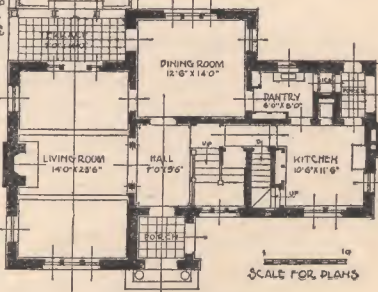
DESIGN BY JAMES M. SCHEINER
770 Linden Street, Brooklyn, N. Y.



SCALE FOR ELEVATION.



SECOND FLOOR PLAN



FIRST FLOOR PLAN

COLOR SCHEME
COPINGS, ALL TRIM,
STEPS, AND FIELD OF
PATTERN IN UPPER
STORY TO BE OF
"DARK GREY MATT"
HY-TEX BRICK.
LOWER STORY OF
FLEMISH BOND WITH
DARK HEADERS.
ALL OTHER BRICKS
WORK OF "LIGHT
GREY MATT."

CUBAGE	
HEIGHT OF STORIES - CELLAR	7' 0"
MAIN FLOOR	8' 6"
SECOND FLOOR	8' 0"
$\frac{3}{8}$ DISTANCE FROM HIGHEST CORNICE TO RIDGE	6' 0"
TOTAL HEIGHT	31' 6"
AREA OF MAIN PORTION - 48'6" X 19' X 16" = 27231.75 CU FT	
• LIVING ROOM WING - 16' X 6' X 8'6" = 3276	
• DINING ROOM WING - 16' X 6' X 8'6" = 3276	
• PORCH	7' X 6' X 11'6" = 122.51
• STEPS	2' X 10' X 2'4" = 8
• TERRACE	15' X 6' X 12'4" = 16.75
TOTAL CUBAGE	33971.50
AT A COST OF 22¢ PER CU FT -	\$7468.17
ITEMS OF APPROXIMATE COST	
EXCAVATING	\$ 320
BRICK	1200
PLASTERING	650
LUMBER - CARPENT	1300
MILLWORK	1150
PAINTING	400
ELECTRIC WIRING	\$ 100
HARDWARE	100
PLUMBING	600
HOT AIR HEATING	200
MISCELLANEOUS	1000

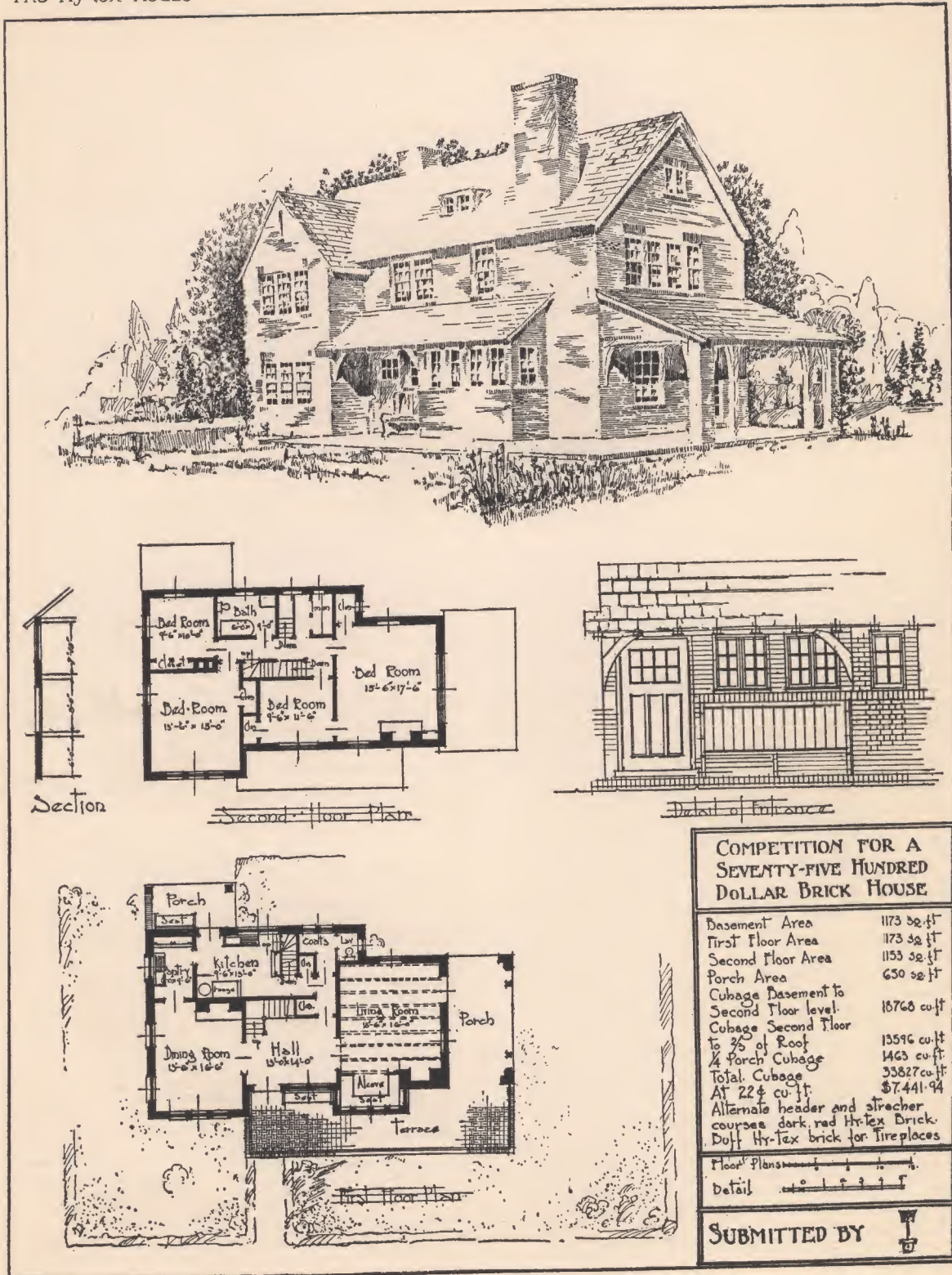


SUBMITTED BY

BRICK HOUSE TO COST \$7500
BRICKBUILDER COMPETITION

DESIGN BY WILLIAM VAN KLEECK SHEPARD
4823 Warrington Avenue, West Philadelphia, Pa.

The Hy-tex House



DESIGN BY ANTON A. LETZGUS
1218 Chestnut Street, Philadelphia, Pa.



COLOR SCHEME
 DOXHARA HY-TEX BRICK OF VARIOUS SHADES
 OF DARK BROWNISH REDS, LAID PROMISCUOUSLY
 FLEMISH BOND, PLUSH JOINTS 1/8 INCH WIDE

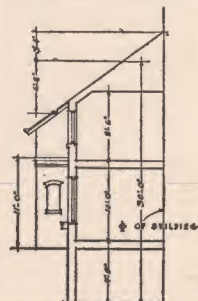
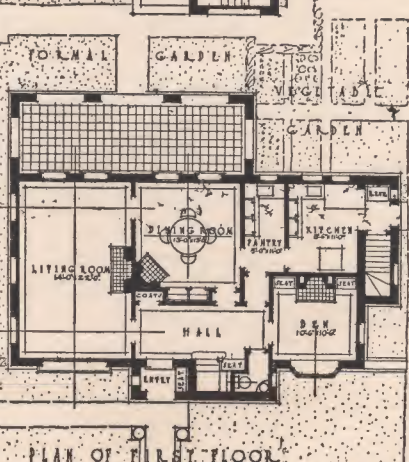
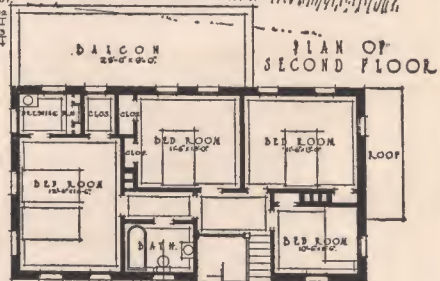
SCALE FOR PLANS & SECTION
 SCALE FOR DETAIL

CUBIC CONTENTS

CUBIC CONTENTS OF MAIN
 BUILDING - 44x24x30+4x11x30 33000
 FRONT AND REAR PORCHES 2000+1000 3000
 KITCHEN ADDITION 46x12x10 180
 TOTAL CUBIC CONTENTS 34082
 TOTAL COST 34082 x .22 = \$ 7497

ITEMS OF COST

EXCAVATING	175
BRICKWORK	2360
PLASTERING	485
LUMBER AND CARPENTRY	1510
MILLWORK	1100
PAINTING	220
HARDWARE	100
ELECTRIC WIRING	200
PLUMBING	450
HEATING	300
MISCELLANEOUS	600
TOTAL COST	\$7500

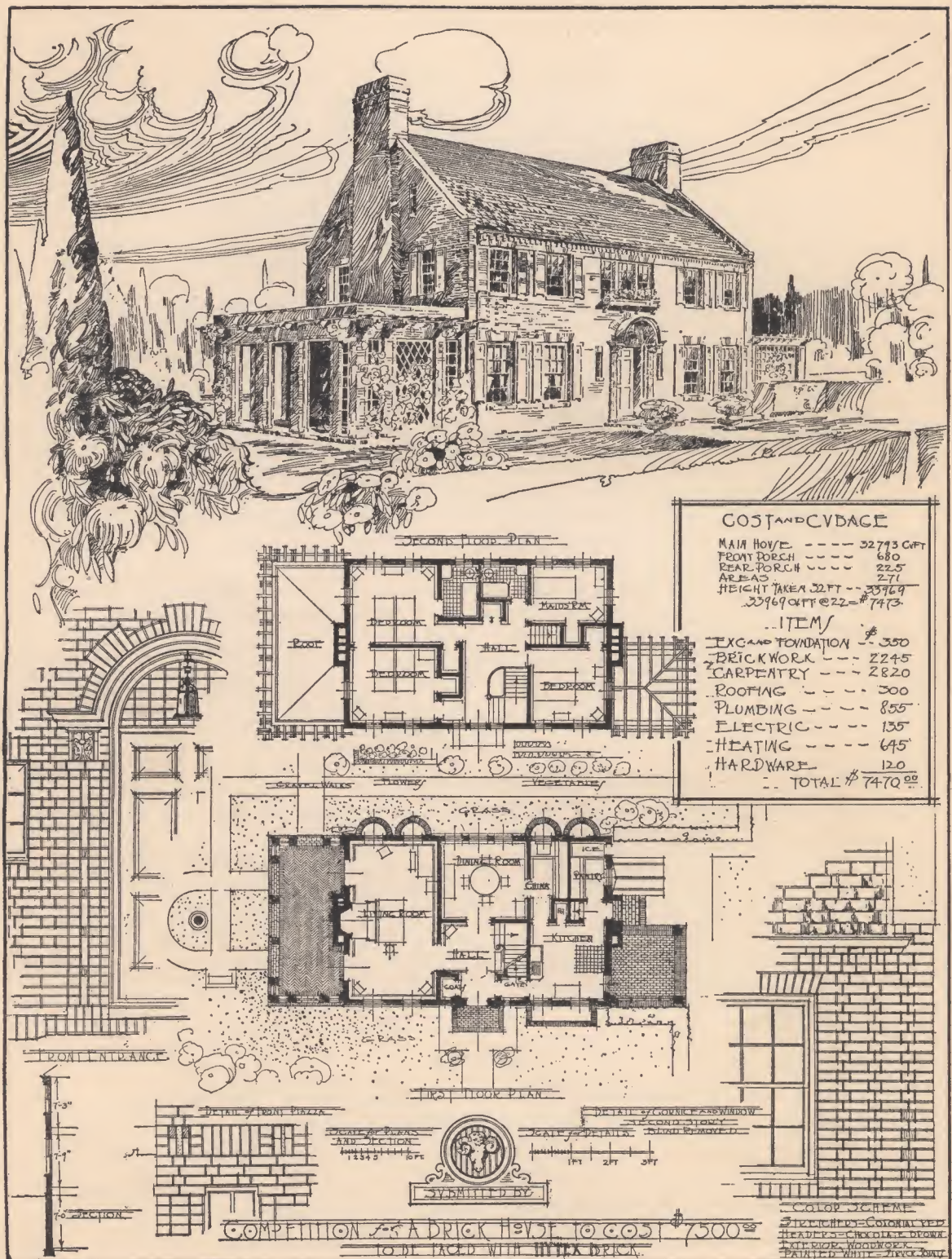


SUBMITTED BY

**A BRICK HOUSE TO COST 7500 DOLLARS
 TO BE FACED WITH HY-TEX BRICK.**

**BRICKBUILDER
 COMPETITION
 FEBRUARY 1914**

The Hy-tex House



DESIGN BY P. DONALD HORGAN
14 Kilby Street, Boston, Mass.

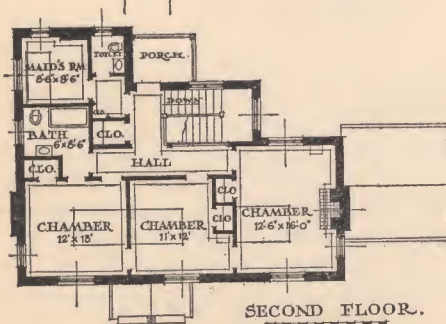
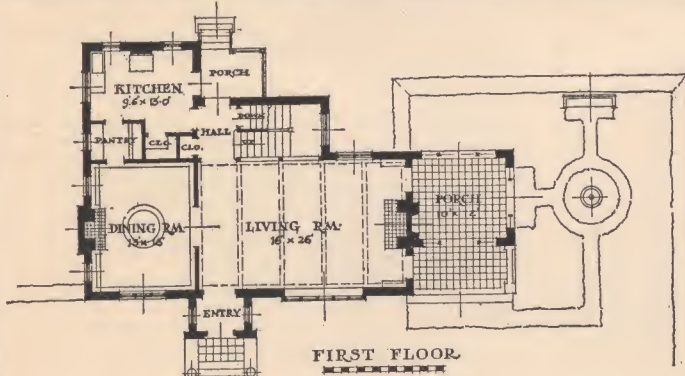


SUBMITTED BY



COMPETITION FOR A BRICK HOUSE TO COST
SEVEN THOUSAND FIVE HUNDRED DOLLARS.

BRICK BUILDER
COMPETITION



EXTERIOR WALLS FINISHED WITH WIRE CUT, MAT FINISH VITRIFIED RED BRICK (KILN RUN). ALL SHADES MIXED HAPHAZARD. GARDEN WALL BOND. DIAPER PATTERN LAID WITH ORDINARY HARD RED BRICK WITH BLACK HEADERS SCATTERED.

CUBIC CONTENTS

MAIN BLDG.	46'6" x 18' x 32' = 23,904	PORCHES
REAR BLDG.	15' x 46' x 28' = 6,076	13' x 12' x 12' = 1,872
STAIRS	7' x 16' x 28' = 3,136	6' x 8' x 10' = 480
VESTIBULE	5' x 8' x 10' = 400	2352 ÷ 4 = 538
TOTAL CUBAGE	34,054 @ 22 ¹ / ₂ lbs. per cu. ft.	\$7500 ⁰⁰

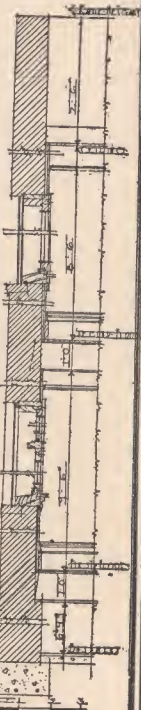
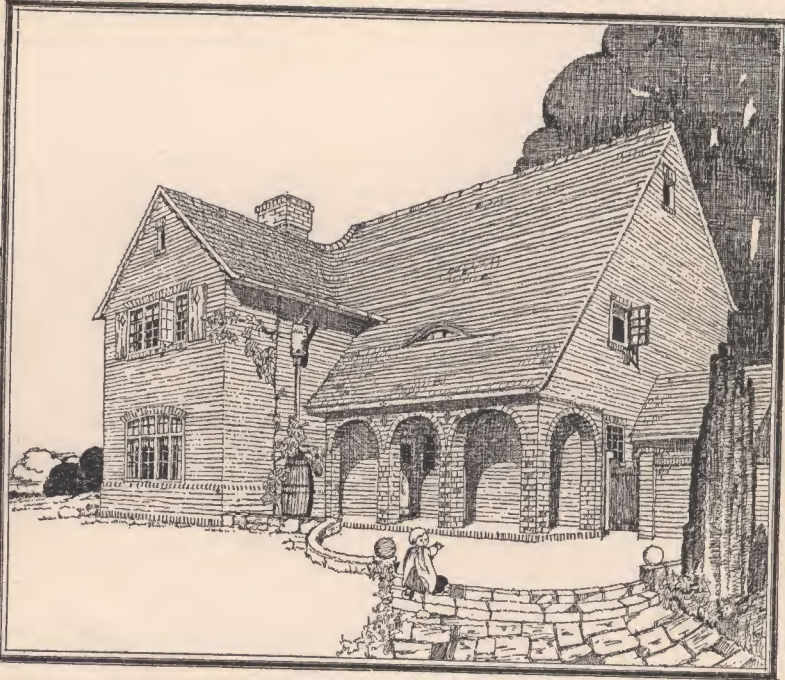
ESTIMATE OF LABOR & MATERIALS

EXCAVATION	\$ 90. ⁰⁰	PLASTER	\$350. ⁰⁰
CONCRETE	450. ⁰⁰	PAINING & GLAZ.	325. ⁰⁰
BRICKWORK	1500. ⁰⁰	HARDWARE	75. ⁰⁰
STEEL	150. ⁰⁰	PLUMBING	610. ⁰⁰
SHEET METAL	100. ⁰⁰	ELECTRIC WORK	100. ⁰⁰
SLATE	425. ⁰⁰	GRANITOID	75. ⁰⁰
LUMBER	550. ⁰⁰	MISCELLANEOUS	150. ⁰⁰
MILL & STAIRS	950. ⁰⁰	CONTRACTOR'S PROFIT	600. ⁰⁰
LABOR	1000. ⁰⁰	TOTAL COST	\$7500 ⁰⁰

DESIGN BY E. L. PLEITSCH AND D. STEPHEN, JR.
408 Board of Education Building, St. Louis, Mo.

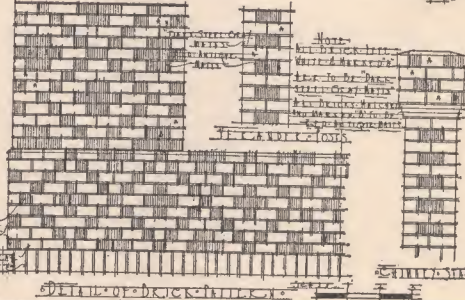
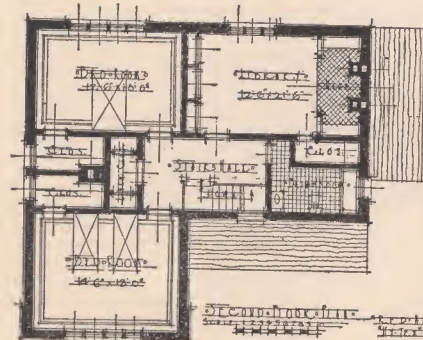
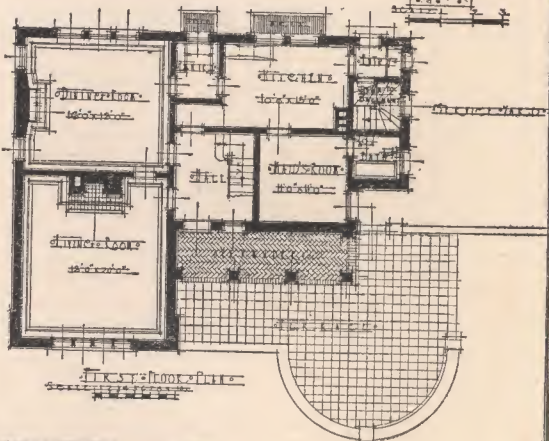
HYTEX BRICK HOUSE

Cost \$7500.00

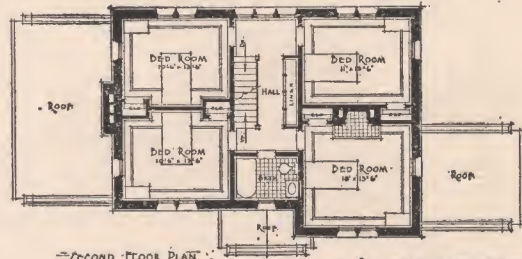
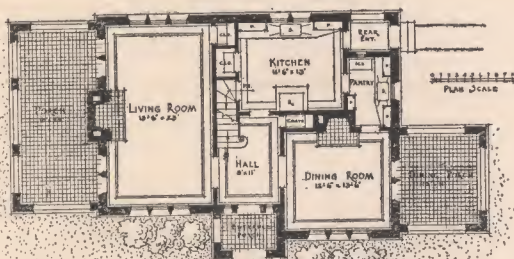


• C.V.D.F.C.T. •

• DETAIL 17 •	72'0" x 23'6" x 6" =	3490
• MAIN PORTION •	20'0" x 38'0" =	760
• LESSER PORTION •	22'0" x 12'4" =	528
	1288 SQ. FT. x 22'6" =	28980
• FRONT PORCH •	22'0" x 6'0" x 9'0" x 4" =	297
• SIDE WING •	6'0" x 19'0" x 11'0" =	1291
		2402
	3407 C.F.T. x 22'6" =	7984.62 COST



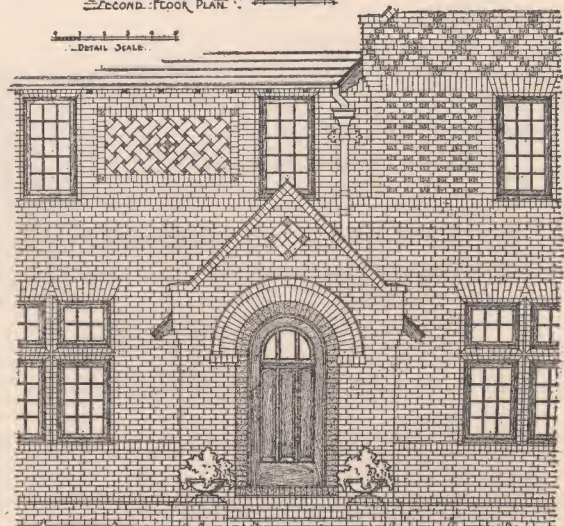
DESIGN BY VINCENT BUCLEY
197 Coleridge Street, San Francisco, Cal.



BRICKBUILDER COMPETITION FOR A BRICK HOUSE

CUBICAL CONTENTS
 MAIN BUILDING 25' x 35' x 35' = 31,250
 DINING RM. EXTN. 3' x 15' x 35' = 1,575
 LIVING RM. PORCH 24' x 11' x 35' = 9,240
 DINING RM. PORCH 15' x 11' x 35' = 5,775
 ENTRANCE PORCH 3' x 9' x 35' = 945
 TOTAL CUBIC FEET 53,880
 TOTAL COST AT 22¢ = \$11,852.40

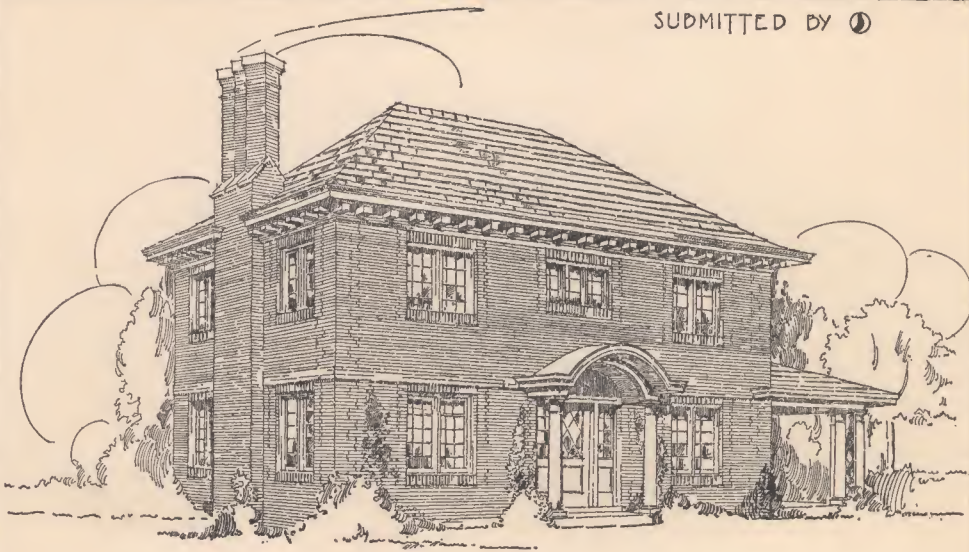
ITEMS OF COST
 EXCAVATION \$100
 MASONRY \$3,600
 CARPENTRY \$2,100
 SLATE ROOF \$275
 HARDWARE \$100
 PLUMBING \$400
 HEATING \$275
 ELECTRIC \$150
 PAINTING \$310
 MISC. EXP. \$100
 TOTAL COST \$7,900



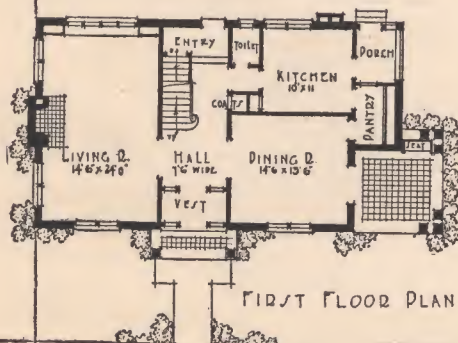
DESIGN BY GEORGE H. SCHWARTZ
 127 India Street, Brooklyn, N. Y.

BRICK BUILDER COMPETITION • A BRICK HOUSE TO COST \$7500

SUBMITTED BY ①

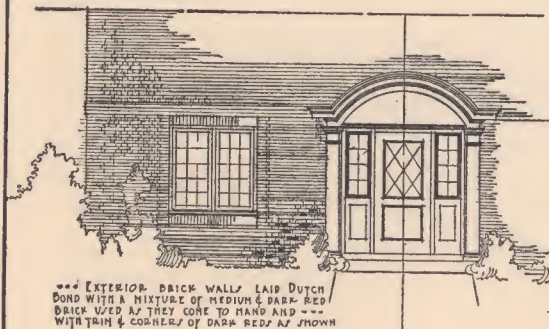


PERSPECTIVE



ITEMS OF COST	
EXCAVATIONS	200.00
BRICKWORK	2500.00
CARPENTRY & MILL WORK	2500.00
PLASTERING	350.00
PAINTING & GLAZING	350.00
HEATING & PLUMBING	600.00
WIRING	100.00
SHEET METAL	150.00
CONTRACTOR'S PROFIT	700.00
TOTAL	7450.00

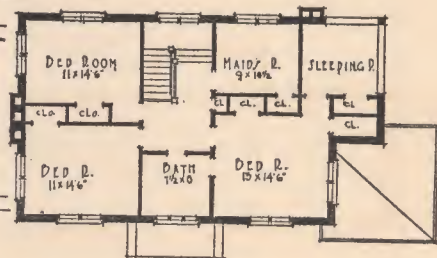
CUBAGE	
MAIN HOUSE	395 X 26 X 30 = 30810
PANTRY WING	6 X 16 X 26 = 2496
PORCHES	167 X 10 X 14 = 507
TOTAL	33813 • A
PRICE PER FOOT 22 X A • EQUAL	7450 COST



*** EXTERIOR BRICK WALLS LAID DUTCH BOND WITH A MIXTURE OF MEDIUM & DARK RED BRICK USED AS THEY COME TO HAND AND *** WITH TRIM & CORNERS OF DARK RED AS SHOWN

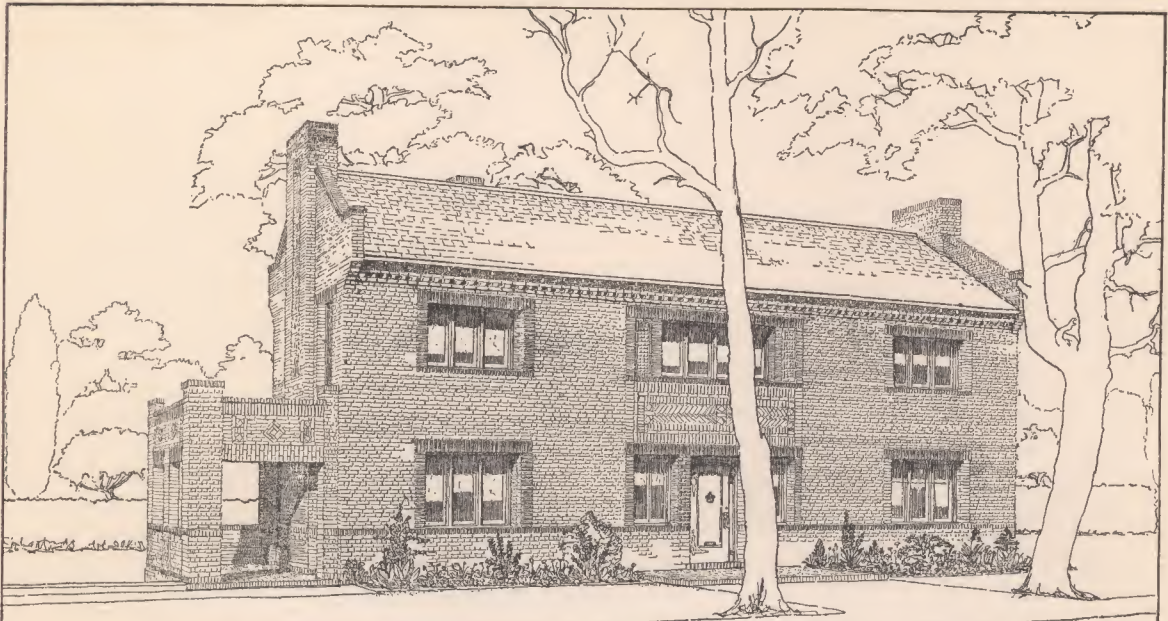
DETAIL AND WALL SECTION

SCALE FOR DETAILS: 1" = 1'-0"

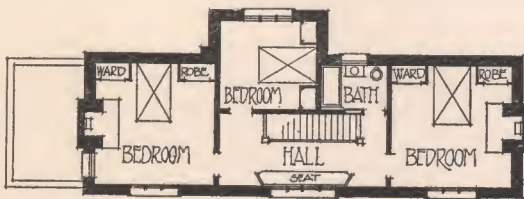


SCALE FOR PLANS: 1" = 1'-0"

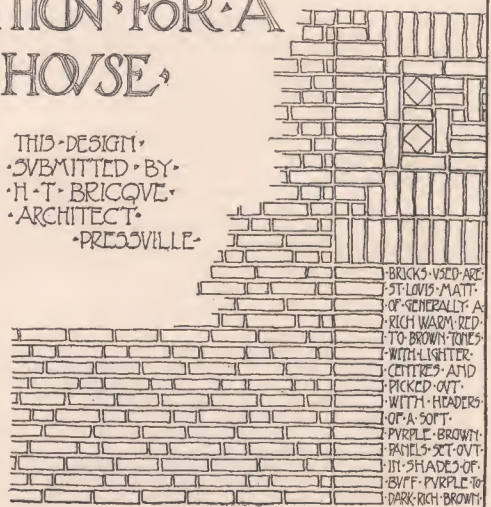
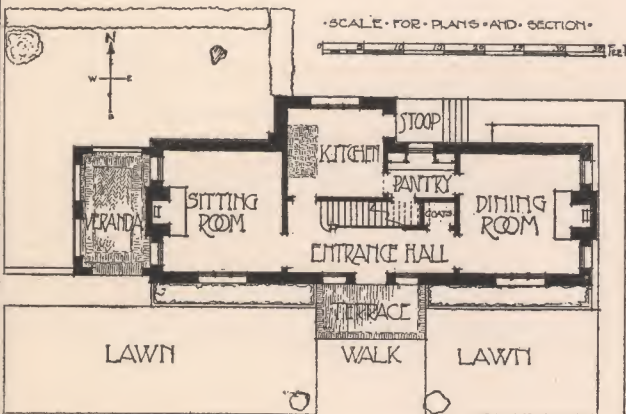
DESIGN BY WILLARD OSLER
341 Trenton Street, Indianapolis, Ind.



THE
 'BRICKBUILDER' COMPETITION FOR A
 'HY-TEX' BRICK HOUSE



THIS DESIGN
 SUBMITTED BY
 H. T. BRICQUE
 ARCHITECT
 PRESSVILLE



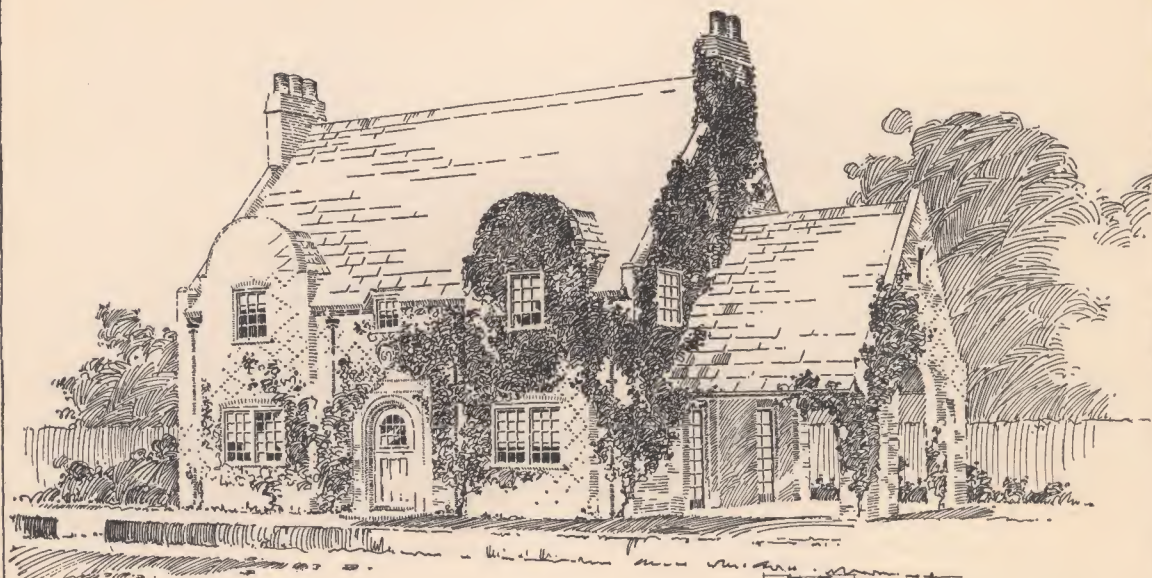
BRICKS USED ARE
 ST. LOUIS MATT.
 OF GENERALLY A
 RICH WARM RED
 TO BROWN TONES
 WITH LIGHTER
 CENTRES AND
 PICKED-OUT
 WITH HEADERS
 OF A SOFT
 PURPLE-BROWN
 PANELS SET OUT
 IN SHADES OF
 BUFF-PURPLE TO
 DARK RICH BROWN

CUBIC ESTIMATE OF COST

MAIN BUILDING $54-6 \times 76-32-3 = 30758-60$ CF
 $14-9 \times 5-6 \times 32-3 = 2604-2$ "
 PORCH $\frac{1}{2} \times 9-9 \times 16-0 \times 4-0 = 54-6$ "
 STOOP $\frac{1}{2} \times 6-0 \times 5-6 \times 3-0 = 29$ "
 TERRACE $\frac{1}{2} \times 13-0 \times 7-0 \times 2-0 = 45$ "
 TOTAL 33982-8 "

AT RATE OF 22 CTS PER FOOT
 COST IS \$7,476-21

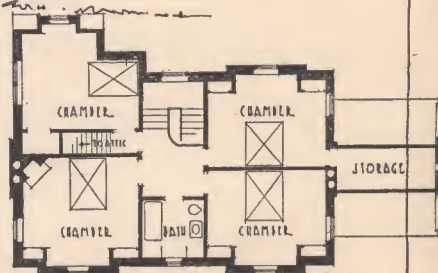
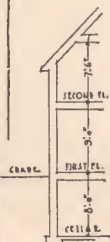
The Hy-tex House



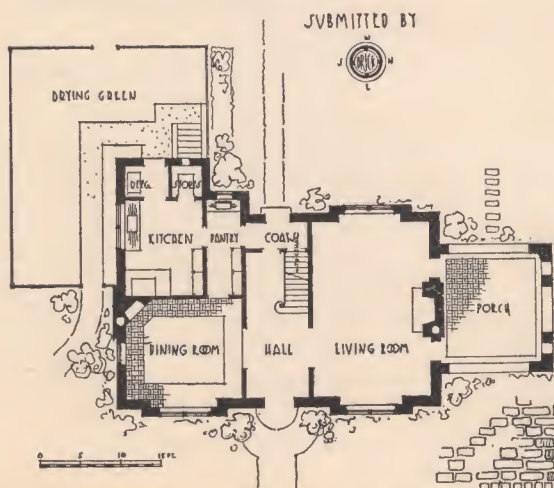
BRICKBUILDER COMPETITION FOR A BRICK HOUSE.

CUBIC CONTENTS - 33760 CUBIC FEET
AT 22 CENTS PER FOOT - \$7427.20

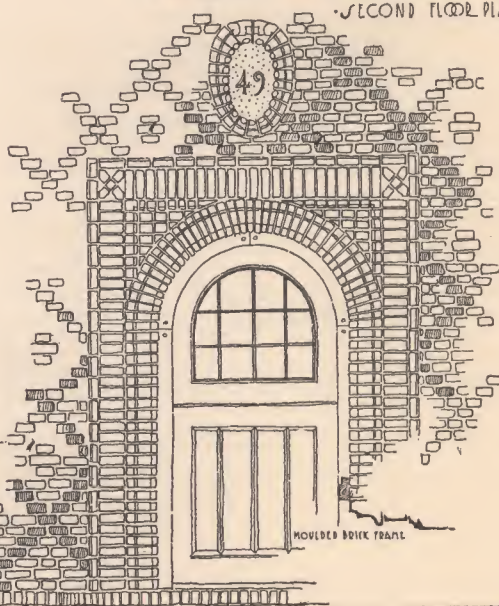
EXCAVATING	\$150.00	PAINTING	150.00
MASONRY	3527.20	HEATING	250.00
PLASTERING	350.00	PLUMBING	400.00
CARPENTRY	220.00	ELECTRIC	150.00
ROOFING	250.00	TOTAL COST	\$7427.00



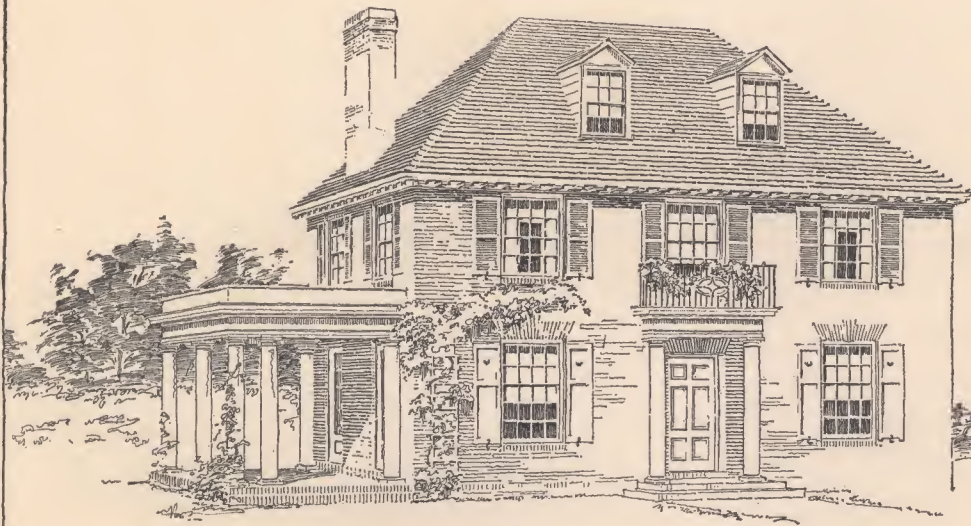
SECOND FLOOR PLAN.



SUBMITTED BY



DESIGN BY GEORGE A. LIGHT
4 East 39th Street, New York, N. Y.



• COMPETITION •

• FOR A BRICK •
• HOUSE TO COST •
• \$7500 • BY

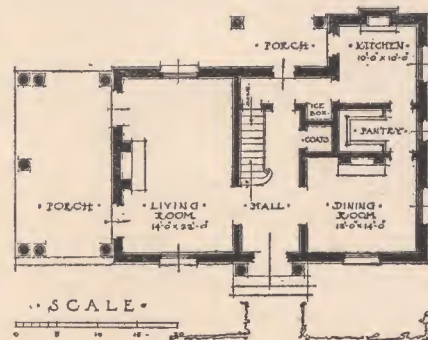
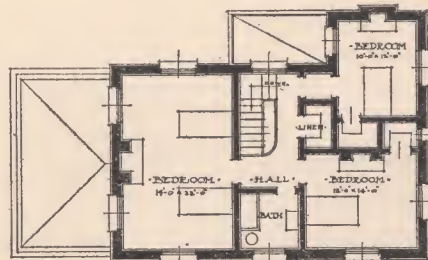


• CUBAGE •

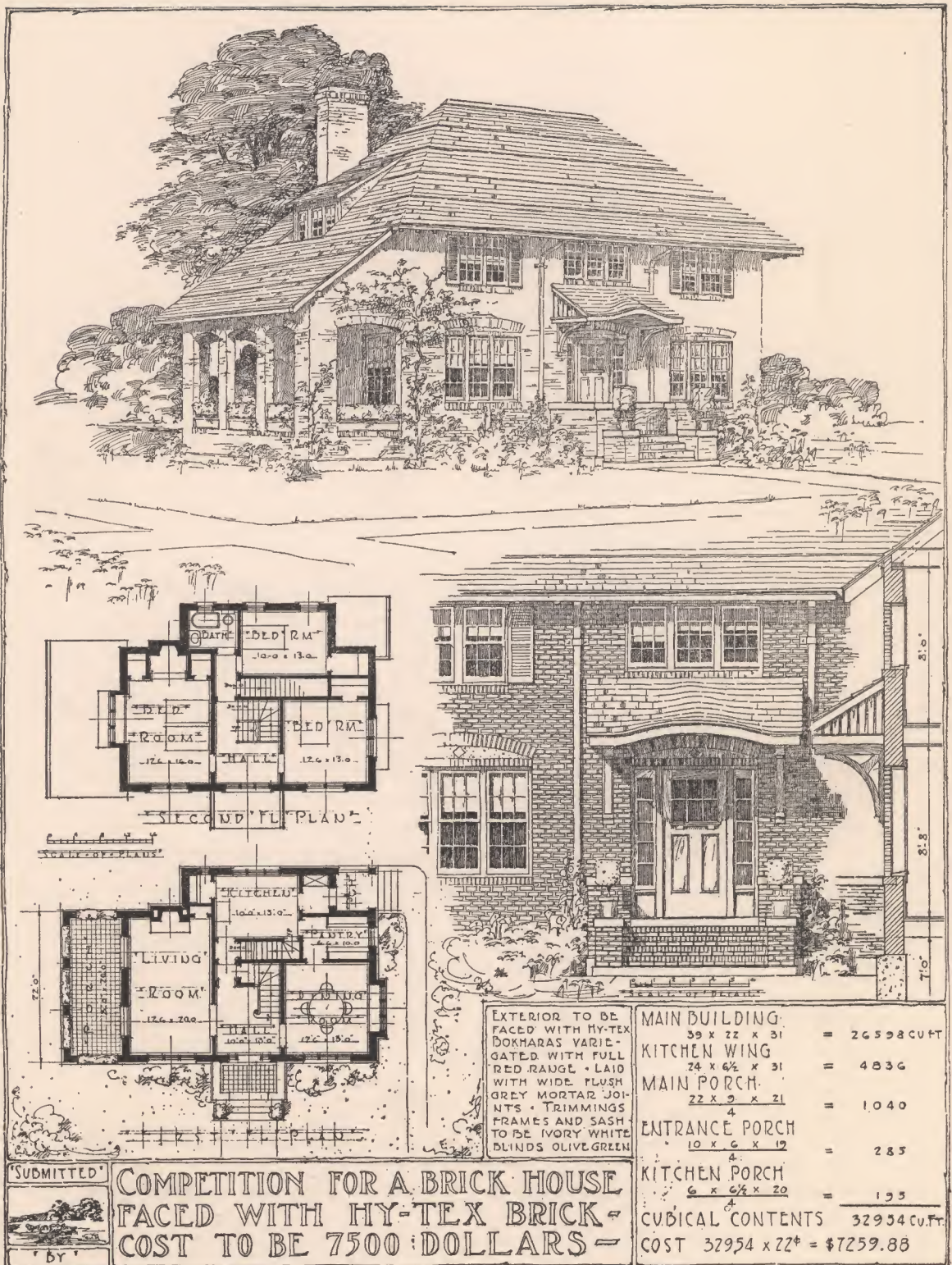
AREA • 396⁶ • HEIGHT 33'0"
32868 CUBIC FT • AT • 22⁴
COST OF HOUSE 7230.96
PORCHES AREA 336⁶ BY 12'0"
4032 CUBIC FT • 25% = 1008
1008 CUBIC FEET • AT • 22⁴
COST OF PORCHES 221.76
TOTAL • \$7452.72

COST

EXCAVATING 320 • ELEC. WIRING 90
BRICKWORK 2050 • PLUMBING 800
PLASTERING 300 • HARDWARE 310
CARPENTRY 1500 • HEATING • 250
MILLWORK 1200 • MISCELLANEOUS 380
PAINTING 300 • TOTAL \$7500.00.



The Hy-tex House



The Function of An Architect

By AYMAR EMBURY II

THERE is certainly no profession, and perhaps no trade, about whose usefulness there exists a wider misapprehension than the profession of architecture. There are, of course, many incompetent architects just as there are many incompetent lawyers and doctors, but the results of the architect's incompetence may be plainly read in his buildings while the incompetence of the other two professions are hidden in the mysteries of the law or of the human body.

A reason for the occasional prejudice against the architect as a necessary evil is misapprehension regarding his true function; and this article is intended to make clear some features about which there exists a doubt.

In the first place, the architect is not a contractor; he does not actually build houses nor hire others to build them for him. His duties are: First, to design the building, make the necessary drawings and write the specifications from which the house is to be built; secondly, to superintend the building; that is, to see that the materials described in the specifications are placed in the positions shown on the drawings. There are, beside these two principal duties of the architect, certain others of a secondary nature which are also necessary during the process of construction.

It is the architect's duty to prepare the necessary contracts in behalf of the owner; and his legal knowledge must be sufficient to safeguard the owner's interests without making the contract unfair to the builder, since a contract that is not fair to all parties concerned will not be upheld in law. He must certify to the amounts due the contractor by the owner as the work proceeds and this means that he must be conversant with the prices of materials and the cost of labor, since over-certification or under-certification may, and often does, result in legal controversy. In addition to these duties the architect is almost always depended upon to act, at least in an advisory capacity, as landscape architect, showing how the house shall be placed upon the lot with the best relation to roads, trees and other surroundings. The direction of paths and the location of shrubbery is very often done under the architect's supervision,

as it ought always to be. The selection of materials and colors for the decoration of the interiors should be influenced by his advice. It will be seen, then, that the architect's usefulness covers a very considerable field outside his fixed and definite functions.

LET us now consider that part of the work which is more strictly an architect's business and with special reference to the sort of work which he would perform in building one of the houses illustrated in this book. In the first place, the designs here shown are only what are known as sketch designs; that is, a contractor could not build a house from them and secure anything like the effects obtained in the designs without having what are known as "working" drawings, which should be prepared by an architect. Before giving further consideration to drawings and specifications, let us treat of the preliminary steps that need to be taken by the architect in serving the interests of the client who comes to him for a house. It is necessary at first to ascertain approximately the amount the owner wishes to spend on his house and what accommodations he will require. Most of the trouble that develops between architect and client is traceable in nine cases out of ten to the first interview, and the fault is at times chargeable to the architect, at times to the owner—and very often to both. If every owner came to his architect wanting only such a house as could be built for the sum which he has named there would be little or no difficulty, but in too many instances the owner wants just a little bit more than his money will pay for, and the architect's hope is that by some happy slant of fortune he may be able to accomplish what he knows to be well-nigh impossible. It is too often the case that the architect fails to warn his client with sufficient emphasis that he is asking too much. It very often happens that the house wanted at a given cost is possible, if the cheaper materials and simplest form of interior finish, painting and plumbing, are used; and the architect tells his client that the house can be built in this simple manner for the stipulated sum only to find that the word "simple" means one thing to the owner and another to himself. Little words like "simple" and "inexpensive" have a wide variety of meaning. They are comparative and not positive and are liable to open a wide field for controversy. Consequently greater explicitness at the very first interview on the part of both the owner and the architect would

result in harmonious relations in most of the cases where trouble now arises.

An owner really should give all his instructions to the architect in writing, in order that his own interests may at all times be protected. This arrangement is equally advantageous to the architect. A record of instructions given over the telephone should be carefully noted by both parties and confirmed in writing.

PROBABLY most, if not all, of the houses illustrated in this book could be built, and rather well, for the limit of cost given in the competition program—\$7500—in districts where brick and labor are not expensive. I believe, however, that if it were contemplated to build them within twenty miles of the cities of New York or Philadelphia it would be necessary to forego oak floors and tiled bath rooms in order to keep the cost within the limit set. In scaling down the cost of a house, the architect's real problem is to preserve to the owner those features which he considers essential in design and cut out those materials which are not absolutely necessary. It is a well known fact that many clients give their architects as a fixed limit of cost an amount varying from ten to fifty per cent below what they actually expect to spend, in the belief that the architect consciously endeavors to make him spend more than he wants, whereas in fact the opposite is the case. It is a very natural desire for an architect to do all that a client demands, and his eagerness to obtain and hold a commission frequently leads him to promise more than his best judgment tells him can be given. This is manifestly unfair and unnecessary; for, by tactful explanation and by comparison of the proposed house with others of the same size actually built, it can be shown any reasonable client just about what can be built for the amount to be expended.

Now as to the sketches themselves; a simple pencil drawing which may not have taken half an hour to make often represents the result of a week's study of the problem in an endeavor to secure a perfect plan or an unusually attractive elevation, not on paper alone but when built. After these sketches are shown to a client, he may want certain changes made in the plans; he may not entirely like the exterior and suggest certain changes, and these the architect must accomplish without impairing his general scheme or injuring the appearance of the house. Even trivial changes of this kind are

sometimes very difficult to make. In one case which came under my observation, an owner wanted an additional closet in his own bedroom, and his architect chased that closet around from room to room for three days trying to find some place where it could be put, without making a bump in one corner of some room. He finally decided to make an entirely new plan rather than spoil the house in this comparatively unimportant respect.

When the sketches have been pretty well decided on, the architect proceeds with the working drawings and specifications. These drawings—which are sent out for estimate—are of the several floors at a scale of one quarter inch to the foot, with elevations of the four sides and sometimes a cross section through the house at the same scale, and not infrequently several sheets of larger scale detailed drawings of wainscot, mantels, doorways and such things, which cannot be fully explained by small drawings or by the specifications. These drawings are the most expensive things and the most important that have to be done, since they must be very exact. All dimensions of the wall thickness, the room sizes, and the positions of windows and doors, must be given; roof slopes must be determined and very careful consideration paid, not so much to the drawings themselves, as to the appearance of the building when executed.

The working drawings are deceptive to the client, since they show in only two dimensions what will be executed in three; and lack of comprehension of working drawings is, next to the question of cost, the commonest source of trouble between the owner and the architect. People who are capable of reading plans find practically no extras involved in the construction of the building; they know in advance how things are going to look with somewhat the certainty of an architect. But people who know nothing about reading plans find that rooms which on paper look big enough, in reality are small, and that arrangements of windows which on plan appear to suit their furniture, when built, do not give them the space they require; and changes need to be made which involve extras for which they blame the architect and not themselves.

With the working drawings goes the specification, and the average specification for the construction of a house, such as illustrated in this book, is a little document of from fifteen to twenty thousand words, not one of which can be omitted without giving a contractor a loophole to escape from his just obligations. In these specifications

must be incorporated every instruction that the owner has given to the architect about the sort of floors and the color of paint, the types of bath tubs, the positions of electric light switches, the materials of which the house is to be built, the kind of kitchen range needed, where mirrors and towel bars are to be placed, and everything of that sort; and an architect must be very alert not to forget what may turn out to be the most desired thing in the house.

Working or scale drawings are made either on tracing cloth or tracing paper. From these, blue prints are made in numbers to supply contractors who are to give an estimate upon the work.

It is inadvisable, in fact unfair, to ask a contractor to bid on work when the owner feels that he will not be acceptable even though the lowest bidder. It is best for all concerned that only those contractors shall be invited to bid who can safely be entrusted to perform the work at the lowest figure submitted.

After estimates have been received, if the lowest one amounts to more than the owner feels himself able to pay, the architect must then proceed with the most difficult and disagreeable part of his entire work, and that is the cutting out of items which can, or must, be spared without impairing either the usefulness of the house or its appearance. In many cases, in fact in the majority of cases, estimates will not exceed the amount the owner is willing to spend and contracts may be signed at once.

Contracts are generally made out in triplicate. One set with specifications is filed with the county clerk to protect the owner against liens which may lie against him if this legal procedure is not followed; one set is kept for the client; and the third is for the contractor. The architect then makes the full size detail drawings, or in some cases details at one-quarter full size, of all parts of the building which require special construction; and, while these details are not as expensive as the contract drawings, they nevertheless are very tedious and costly to make. Probably in a house of the size of those in this book, there would be issued about ten drawings for estimate and about fifteen full size details. A draughtsman would average three days work on each of these. If we assume that he gets four dollars a day (a reasonable price), these drawings would cost the architect about three hundred dollars; and this does not include overhead expenses, such as rent, stenographer, office boy, light, blue printing, materials and such things—nor any allowance for bad debts.

If the architect is to superintend the construction of the house—in some cases he does and in others he doesn't, depending entirely upon the agreement made with the client—he or his superintendent of works will make at least weekly visits to see that the work is being carried out according to the drawings and specifications. If during these visits he finds that bad work or materials are being employed, it is his duty to order the work done over again in a proper manner. There is usually a clause in specifications which requires that the contractor shall make good any defective work that may become apparent within a year after the completion of the house. It is customary for an architect to visit the house several times after it is occupied for the purpose of ascertaining if there are any defects which are attributable to bad workmanship, and if there are to insist that the contractor do the necessary repairing.

THE foregoing gives a fairly complete idea of what the architect does for his money, and may also show a prospective home builder that the money so spent is well earned. There are, however, two or three other points which should be touched on. First, it should be understood that the architect does not assume financial responsibility either for the cost of a house or for the mistakes made during its construction, unless these are due to negligence on his part. The owner in accepting the plans and specifications, which he does either before or when signing the contract, should see to it that everything that he wants is in the plans and specifications, since his acceptance of them will be held by any court to be proof that the architect has faithfully performed his duty. If anything is omitted from the specifications that the owner has told the architect he wants and has to be put in afterwards as an extra, it does not follow that the owner is paying twice for this item; for, if it had been in the original specifications, the original contract price would have been larger, since contractors make a list of every item to be done, price them, foot the total, and add a percentage or lump sum as a profit. The second point of extreme importance should be the realization by the owner that the architect's services are worth all he charges for them and often prove an actual saving to the owner.

If one were to go direct to a contractor with a book such as this, containing as it does very many beautiful designs, he would find many who would say: "I will build the house you like for so many

dollars.” As has been repeatedly demonstrated, however, contractors cannot build houses from drawings like those shown here without the services of an architect for the reason that it requires a man specially trained to execute a house from a drawing. It must be remembered also that some one has to make working drawings, and if it is the contractor he has to include the cost of this work in his estimate, so that the owner does not save this part of the expense in letting the contractor do all the work, nor is he likely to get the same class of house he has in mind.

An owner dealing with a contractor direct, rather than through an architect obtains only the very scantiest sort of a description of how the house is to be built, with the result that the contractor can build in almost any way he sees fit, so long as he complies in a general way with the terms of the contract. Under these conditions, the owner has little chance of recovering where poor materials and workmanship have been employed; moreover, he has no way of finding out if the contractor's price is a fair one or not. On the other hand, if the working drawings and specifications are prepared by an architect, competitive bids may be taken and the lowest price plus the architect's fee will more than likely be much lower than if the work were given directly to a contractor, and in addition the owner will be assured of a well designed, well built house.

THE architect's fee should be among the first things discussed in arranging for a house. It should be made perfectly clear in advance what the architect is to be paid for his work and what work he is to perform, for the reason that different architects charge different prices and prices vary with the amount and kind of services to be rendered. The usual fee ranges from six to ten per cent on the cost of a building. If the architect is a young man with no large amount of business on hand and an inexpensive office to maintain, he will very likely give full services for six per cent on the cost of the building. If he is a man of recognized ability maintaining an expensive office and is engaged upon many large commissions—he will charge a higher fee, and in most cases is worth it.

The architect's fee for a country house is usually paid in three parts: One-fifth of the whole when the sketches are accepted by the client, two-fifths when the estimating drawings and specifications are completed and the balance when the house is finished. If the

house is an expensive one or one that requires a long time to build the last two-fifths of the commission would probably be divided into several payments. Very often in place of commission an architect agrees upon a fixed sum for his services, and if the owner has any feeling that an architect will try to run the price up to increase his commission, he will be much wiser to settle the fee on a fixed sum basis.

One thing more:—An architect does not as a rule submit sketches “on approval,” any more than a doctor makes a diagnosis without being paid for it if his patient is found to be perfectly healthy, or a lawyer enters into the merits of a case without expecting a retainer; and while there are doubtless many men who will offer to submit sketches on approval, they should be regarded with suspicion.

Since the writer is himself an architect, the questions of the relations between architect and client and of the duties of an architect may have been unduly emphasized from one standpoint and too little from the other. It is assumed, however, that those who read this article will in most cases be “clients” and need no explanation of what their feelings are. What an architect should be expected to do for his money has been shown, as has the fact that his services are not entirely without value. As a matter of fact, an experienced architect is almost always a well informed man. If he has built many houses, he has the collective experience of many house keepers behind him. He must be something of a lawyer; and also a reasonably good business man, so that the accounts between the owner and contractor will be kept in something like order. He must be fully acquainted with the various building trades, such as mason work, carpentry, painting, tinsmithing, plumbing, heating and electric work; and he must also be an artist, able to execute in wood, brick and stone, through the medium of poorly informed and in-artistic mechanics, a beautiful house which in all respects will meet the exacting demands of the owner.

The Story of Brick

By G. C. MARS

MR. EDWARD J. BANKS, field director of the University of Chicago's Babylonian expedition, reports having found brick at Bismaya, in the Euphrates Valley, which are as good as when they were first made four thousand five hundred years before our era, and adds that there are reasons to believe that the art of brickmaking was known and practiced ten thousand years ago.

As an artificially prepared product, brick is the oldest building material known to man. From the earliest pre-historic times, the inhabitants of ancient Sumeria, Chaldea and Egypt built their houses of sun-dried brick; and centuries afterwards when history, as we know it, was just beginning to dawn, their descendants built temples, palaces and ramparts of brick. Ages before Khammurabi had given his celebrated laws to the Babylonians, before Abraham had been called from Ur of the Chaldees to the Land of Promise, or Moses had led the children of Israel out of their Egyptian bondage, the kings of Chaldea and the Pharaohs of Egypt had dwelt in houses made of brick. As to Nebuchadnezzar, King of Babylon, one of the greatest builders that ever lived and the very greatest builder in brick of all time, he is hardly worth mentioning here, as he really belongs to modern times, going back only six centuries before Christ.

The Greeks doubtless learned the art from the Chaldeans, and that too at a very early epoch, for Schliemann in his excavations of ancient Ilium, made famous by the royal battles of Achilles and Hector and celebrated in the immortal lines of Homer, found great platforms and walls built of brick.

And no less than the distinction of its great antiquity, brick can lay claim to the distinction of a world-wide use, even in very early times. For not only can China, India, Persia, Babylonia, Assyria, Egypt, Greece and Rome, in the old world, boast of ancient brick remains, but the Western world, new to its white discoverers in the fifteenth and sixteenth centuries, revealed old civilizations that had long practiced the art of making and building in brick. The Spanish Conquistadores found, among the Incas and Aztecs, houses, temples, palaces and monuments of brick.

But so far as our modern use of brick is concerned, Rome the master builder of antiquity, has been our teacher. It is probable that the Romans learned their brickcraft from the Greeks. At any rate, they carried it to the height of perfection so far as its structural value is concerned. They used extensively a hard and enduring burnt brick in the body of walls which were generally covered with stone or marble slabs or stucco—a practice still followed in Italy.

The manufacture was under government surveillance and the brick bore the name of the maker—and also that of the Consul, from the time of Trajan (98-117 A.D.). The legionaries knew the art and made brick wherever they were stationed, from which fact we can often trace their movements and the dates of their occupancy. From the Euphrates to the Pillars of Hercules and from the Libyan desert to the Firth of Forth, are found the remains—often very extensive—of Roman brickwork.

In the late imperial epoch, the brick came to be made with a finer surface and were freely exposed in courses alternating with stone. It was this practice which doubtless led to the Byzantine style of brickwork which was laid in bands of color, broadly and strongly marked—a style widely employed in ecclesiastical building, and still frequently seen in the Russian churches of today as an inheritance of Byzantine culture.

With the decay of the Roman Empire in the West, the Church took up and carried on the brick tradition in its ecclesiastical structures. In those countries where stone was rare, such as Northern Italy, Southern France, and the low lands of Northern Germany, brick enjoyed during the Middle Ages an extensive use.

It was not, however, until after the Crusaders had stirred the mind of Europe to a new life, preparing the way both for the great Gothic period of architecture in the thirteenth century, and for the industrial activities of the free Communes, that brick entered upon its palmy days and became a natural and popular material for building, in the hands of the great free mason guilds of the period.

In Northern Italy, the brick used were exclusively red, fine examples of which are found in the churches, palaces and public buildings of Siena, Milan and Bologna—sometimes laid, after the old Roman manner, in alternating courses with stone.

But it was especially in the North of Europe that brickwork flourished at this time. The great burgher towns of the Hansa in

Northern Germany and Flanders, growing in wealth and power, vied with each other and spared no expense, in adorning their cities with splendid buildings, both public and private, most of which were in brick—as witness the famous belfry of Bruges, of the thirteenth century, celebrated in the lines of Longfellow; the great Hall at Antwerp, of the fifteenth century; or the Rathaus, of the fifteenth, and the stately Marienkirche, of the thirteenth century, at Lubeck.

Although quite apart from the general current of European life, and whether influenced by their Christian neighbors or their co-religionists of Africa, who drew their inspiration from Byzantine art, the Moors of Spain revealed splendid ability in the handling of brick and employed it with striking effect, as we may see in such noble structures as the Alhambra at Granada and the mosque, now cathedral, of Cordova.

WHEN the Renaissance, in the sixteenth century, broke over the Alps into France and Germany, brick practically disappeared from public building in those countries, and did not get back its old medieval prestige until the middle of the last century, when the wonderful advances in the technique of its manufacture revealed its possibilities, especially in Germany, to the builder and architect. In the Low Countries, Holland and England, however, it held its own and even made substantial gains, as in England.

This gain in England is easily explicable when it is remembered that, with the Renaissance in England, brick and its possibilities of manufacture were essentially a rediscovery. In England, as the Roman province of Britannia, brick were made and extensively used for nearly four hundred years until the Legions were recalled at the beginning of the fifth century to protect Rome, trembling before the onrush of the northern invaders. From that time on, until the thirteenth century, the only brick used in England were those taken from the Roman remains. In the time of the first two Edwards (1270-1327), it is probable that the Flemish mode of brickmaking and the style of building pointed gables were introduced into England, but there was no general manufacture and use of brick in that country until the fifteenth century, and then only for important buildings.

In the days of Henry VIII (1509-1547), however, when the Renaissance was beginning to be felt in the Island Kingdom, brick and its uses were brought to a high state of perfection, a fact probably

due to Henry's encouragement of artisans from Flanders. In the following century, the great London fire, 1666, not only transformed that city from a wooden to a brick town, but gave a great spur, all over England, to the development of the manufacture and use of brick, as well as to its ornamental treatment.

After the Renaissance had run its course, brickwork for a time declined in England, but in the days of Queen Anne and the Georges, or during the 18th century, it regained favor and became the honored medium for the expression of that comfort and dignity which we so often see in the fine old country houses scattered throughout England. It was this style that exercised the great formative influence on our own simpler colonial architecture, both of the North and of the South.

In the early days of the American colonies, small quantities of brick were imported from Holland and England, and doubtless from time to time they were brought to the colonies in Dutch and England bottoms as ballast. But the colonists did not at all depend upon such sources for their supply of brick; for American brick-making, according to the most reliable data, was established at a very early period and was well able to supply the home market.

Davis in his *Practical Treatise on the Manufacture of Brick*—followed by the *Encyclopedia Britannica*—informs us that the first brick house in this country (no longer standing) was erected on Manhattan Island in 1633 by Wouter Van Twiller of Amsterdam, a governor of the Dutch West Indies Company, and that the first brickmaking in the colonies was at New Haven in 1650. The claim made for the Cradock House (still standing) at Medford, Mass., that it was built in 1634 is denied by certain authorities, who attribute it to Peter Tufts and assign the date 1677-80.

So far as the introduction of brickmaking into this country is concerned, the new *International Encyclopedia* is authority for the statement that brick were made in Virginia as early as 1612, which would seem to indicate that brick houses must have been built in Virginia as early as that time, a conjecture confirmed by evidence cited in Bruce's *Economic History of Virginia in the Seventeenth Century*. This earlier date for brickmaking in the colonies is substantiated by the historical studies of Ries & Leighton, who in their *History of the Clay Working Industry in the United States*, give the following localities with their dates: Virginia, 1611; Massachusetts

and New York, 1629; Maine, 1635; North Carolina, 1663; Rhode Island, 1680; Pennsylvania, 1683. And so prosperous had the industry become by the end of the eighteenth century, continue these authorities, that brick were being exported from this country. In 1791, the export of brick amounted to 743,000. From that time on, American brickmaking has followed the natural growth of the country, until today, in point of quantity and quality, it leads the brickmaking industry of the world.

This growth of brick manufacture has exercised a very wholesome and potent influence in furthering a purer and sounder style of domestic architecture which, during the middle of the century, fell into the slough of a bastard classical or Renaissance eclecticism, or of Rococo and Barroque monstrosities.

The Georgian influence, largely the result of the school of such eminent architects as Inigo Jones, Sir Christopher Wren, and Sir William Chambers, made itself felt in the English colonies along our coast, and was adapted to the uses of either the simple Round Head of New England or the more pretentious Cavalier of Virginia. This colonial style presented very worthy types of domestic architecture, the simple merits of which have been widely appreciated in our more modern style of building. During the past decade or two, especially, this simpler style has been freely adopted—and adapted to our needs—or a simple and graceful form of line and curve has been used in creating a style that meets the practical uses of our modern world, as well as the requirements of artistic taste.

THE great variety of beautiful face-brick now manufactured naturally appeals to the architect as offering an opportunity in the wall surface for the exercise of his finest artistic efforts. In his skilful hands, the selection of the bond, the treatment of the mortar joint, and the color tone and texture of the brick, are so many varied and variable elements with which he can weave a fabric of great beauty. The distinction of brickwork is that, by reasons of its numerous units, it is a plastic material, yielding to every touch of the architect. So that the result, like every work of art, has a distinct life, character and individuality of its own, such as no other material, except marble or stone in vast structures, can give. Although rivaling marble or stone in its adaptability to pretentious buildings, brick has the advantage of being peculiarly fitted for the

architecture of the home. And here it offers not merely the highest artistic merit, but pre-eminently stands for comfort, safety and economy. Once built, a brick house requires no expenditure for the maintenance of its wall surface; it defies the corrosion of the elements; as a product of fire, it scorns conflagration; and offers comfort in all seasons of the year.

Of the manufacturers of face-brick in America, for the quality, quantity and variety of product, the Hydraulic-Press Brick Company holds the leading place. Established in St. Louis, in 1868, it steadily won, by the quality of its product and the efficiency of its service, the approval of the brick world, until today it works numerous clay deposits in ten different states, and keeps its fires burning in twenty-two different plants.

In the main, there are two kinds of brick made by the Hydraulic-Press Brick Company, the dry-pressed and the wire-cut brick, both indicated in the name Hy-tex.

The dry-pressed brick are for the most part made of alluvial or fire clays, first seasoned and then, after being ground to a coarse powder, submitted in the hydraulic machine to a pressure of many tons. Such a machine will turn out from 20,000 to 50,000 brick a day, hard enough, in their green state, to be handled with impunity, the number depending not only on the size of the machine but the nature and condition of the clay. A day or so suffices to dry out the superficial moisture—for it must be understood that “dry-pressed” does not mean absolutely “dry”—when they are ready to be stacked or “set” in the kiln, in number all the way from 50,000 to 600,000, and subjected to a temperature that may rise to 2500 degrees Fahrenheit, for a period of from six to eleven days. They are then said to be burned off, when the kiln is allowed to cool and the brick sorted and piled in sheds, or shipped to the point of operation.

These brick are usually burned in either up-draft or down-draft kilns, although in certain localities the continuous kiln is employed. In up-draft kilns, the flame passes directly up through the brick from the bottom to the top of the kiln. Down-draft kilns are so contrived, by means of a bag wall, that the flame is prevented from striking the brick until it has first reached the top of the kiln, when it pours down through the brick to the flues. In the continuous kiln, the flame is drawn horizontally through the brick mass. The way in which the brick are “set” and the method of burning result in

producing various effects, so that various kinds of brick are produced in the same kiln—known when taken promiscuously as the kiln-run. It is this hydraulically pressed brick that puts the “Hy” in Hy-tex.

The wire-cut brick are made in an entirely different way and usually of a different material. Instead of clay, shale for the most part is used which, when chemically considered, is indeed clay but differs from it greatly in physical constitution. Shale is a clay which has geologically been subjected to such pressure that it has become very hard and has reached the consistency of soft stone, just short of the laminated condition of slate. Shale when found in deep deposits is mined very much as soft coal, and is approached either by drifts or vertical shafts.

For brickmaking, it is crushed and reduced to the consistency of stiff mud—hence the term stiff-mud brick—when it is run through a machine, terminating in a die, from which it is forced upon a long table in the form of a rectangular strip or ribbon, with a cross section slightly greater than that of the standard brick—to allow for shrinkage—and is cut into proper lengths or widths by fine wires revolved as the diameters of a wheel. These machines can turn out all the way from 40,000 to 100,000 brick a day, and these, after being dried, are set in the kiln and burned in the same manner as the pressed brick.

In case face-brick of a certain variety are wanted, the stiff-mud ribbon, which is smooth as it issues from the machine, may be left smooth, or scraped with a wire to produce a rough or matt surface. This roughening of the mud ribbon, in various ways, gives a variety of pleasing effects to the finished brick surface, which has become very popular in recent years among architects and builders. Although every kind of brick, rough or smooth, has a surface texture of its own, it is these artificially roughened, or matt, brick to which the name texture, in one form or another, is usually applied—and they are responsible for putting the “tex” in Hy-tex.

THE Hydraulic-Press Brick Company justly prides itself on a third kind of brick, which is the finest and most expensive brick on the market, although the most economical when its durability and perfect finish are taken into consideration. They are the enameled or Hy-namel brick. For a number of years the Hydraulic-Press Brick Company bent its resources on producing an enameled

brick that could compete with the fine imported English variety. As in many like cases, repeated experiment almost ended in despair; but persistence won the day, and a brick was finally produced that not only equaled the imported competitor, but surpassed it.

The Hy-namel brick stands unrivaled in the beauty and durability of its enameled surface. That it can be offered as neither scaling, crazing, or discoloring, is due to the thorough and skilful method of its manufacture. The dry-pressed brick is first prepared as a thoroughly fired biscuit. It is then treated with the enamel finish and burned again, much as fine porcelain is burned. The trouble taken is more than repaid by the satisfaction it gives the manufacturer and the service it renders the builder. So sure is the Company of the entire soundness of these brick, that it guarantees their durability and freedom from defect.

Closely allied to Hy-namel are the Porcelain and Salt Glaze varieties. To secure the Porcelain surface, the brick is mechanically treated with a preparation which is thoroughly burned into the clay, producing color effects that run through a beautiful range of grays. The Salt Glaze is secured in the kiln during the process of burning and is a smooth impervious surface admirably suited to meet the requirements of sanitary construction. But while the Porcelain and Salt Glaze brick approach in appearance and function the Hy-namel, they belong in reality to the class of Hy-tex brick.

By no means the least advantage in dealing with the Hydraulic-Press Brick Company is its entire responsibility. Well-nigh fifty years of operation has not only put it in the forefront of the face-brick manufacturers of the world, but gives it the capacity to meet with prompt efficiency every demand, no matter how large, made upon it. Hy-tex brick are found in thousands of modest homes, small stores, and little churches and schools all over our country; but they are also found in thousands of palatial residences, university buildings, great churches and schools, lodges and temples, towering sky-scrapers, and public buildings.

There is, however, no problem of building that comes so near to a man's heart—or to his purse—as the problem of a home, and the man who is thinking of building a home cannot afford, viewed from the standpoint of real economy, comfort, fire-safety or beauty, to proceed until he familiarizes himself with the merits of Hy-tex.



Look for this Name on
the Brick You Buy.

EVERY TEXTURE

Enameled
Porcelain
Salt-glazed
Press
Re-press
Rough Wire-cut
Smooth Wire-cut



The Standard of
Quality in Brick.

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Gray, Buff
Golden Rod
Red
Velour
Bronze
Gunmetal

BE A HOUSEHOLDER

Have a home you can call your own. "There's no place like home," is not only poetry, but hard solid fact.

The best property, financially and sentimentally, to have in your own name is your home. It is one of the inalienable rights of every American citizen to be a home owner, to have a place absolutely sacred to himself and his family; into which no unwelcome guest may intrude; and where he can, as in his own castle, defy the slings and arrows of outrageous fortune. A homeless man is like a man without a country.

A-B-C OF HOME BUILDING

A—Build your home the way you want it, and do not be compelled to take a house the way the landlord wants it.

B—Build it of Brick. For a home, brick is more economical than stone, more lasting, comfortable, and secure than frame, more real and living than stucco or cement — and may be made more beautiful than any of them.

C—Build your home of Hy-tex Brick, as the latest word in brickcraft. There are one hundred different forms, color tones, and surface textures to choose from. Every Hy-tex brick is sound to the core and rings like a bell. To tell your friends that your home is built of Hy-tex brick is equivalent to telling them that you have the best and most beautiful material that the art of moulding and burning brick can produce.

HYDRAULIC-PRESS BRICK COMPANY

SAINT LOUIS

LARGEST MAKERS OF FACE BRICK IN THE WORLD

BRANCH OFFICES: Baltimore, Md.; Chicago, Ill.; Cleveland, Ohio; Dubois, Pa.; Davenport, Ia.; Indianapolis, Ind.; Kansas City, Mo.; Minneapolis, Minn.; New York City; Omaha, Neb.; Philadelphia, Pa.; Toledo, Ohio; Washington, D. C.

For Information Write to the Office Nearest You